C O R N E L L UNIVERSITY MEDICAL BULLETIN

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A N N O U N C E M E N T

MEDICAL COLLEGE

NEW YORK AND ITHACA

1924

JANUARY, 1924
PUBLISHED BY CORNELL UNIVERSITY
477 FIRST AVENUE
NEW YORK CITY

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and its Research Laboratories

C O R N E L L U N I V E R S I T Y MEDICAL BULLETIN

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OF THE

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CALENDAR

1924

Jan. 8. Tuesday, 9 A.M.-Christmas recess ends. Second term begins.*

Feb. 22. Friday-Legal holiday.

- March 15. Saturday, 6 P.M.—Second term ends.*
- March 17. Monday 9 A.M.—Third term begins.*
- April 17. Thursday, 6 P.M.—Easter recess begins. April 21. Monday, 9 A.M.—Easter recess ends.
- May 30. Friday-Legal holiday.
- May 31. Saturday, 6 P.M .- Third term ends.
- June 2. Monday-Examinations begin.
- June 12. Thursday-Commencement.
- Sept. 9. Tuesday—Examinations begin for admission to the first year of all departments of Cornell University at Ithaca, N. Y.
- Sept. 23. Tuesday—Examinations begin for conditioned students and for those applying for advanced standing in the Medical College at New York City.
- Sept. 29. Monday-Registration.
- Sept. 30. Tuesday, 9 A.M.—Instruction begins.
- Oct. 13. Monday-Columbus Day, legal holiday.
- Nov. 4. Tuesday-Election Day, legal holiday.
- Nov. 26. Wednesday, 6 P.M.—Thanksgiving recess begins.
- Dec. 1. Monday, 9 A.M.—Thanksgiving recess ends.
- Dec. 20. Saturday, 6 P.M.—First term ends.* Christmas recess begins.

1925

- Jan. 5. Monday, 9 A.M.—Second term begins.
- Feb. 23. Monday—Legal holiday. March 14. Saturday, 6 P.M.—Second term ends.*
- March 16. Monday, 9 A.M.—Third term begins.*
- April 9. Thursday, 6 P.M .- Easter recess begins.
- April 12. Monday, 9 A.M.—Easter recess ends. May 29. Friday, 6 P.M.—Third term ends.
- May 29. Friday, 6 P.M.—Third to May 30. Saturday—Legal holiday.
- June 1. Monday-Examinations begin.
- June 11. Thursday—Commencement.

*The session is subdivided into three terms of twelve, ten, and eleven weeks, respectively, and courses are scheduled in conformity with this subdivision.

All students must be registered at the secretary's office at the opening of the session. No student will be admitted after Registration Day without special permission of the Faculty. Immediately after registration the fees must be paid at the treasurer's office.

Any student may take the first year at either New York City or Ithaca. All students take the last three years at New York City only.

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^{*}Term of office expires in 1924, the next group of six in 1925, etc. B, elected by the Board; A, elected by Alumni; G, appointed by Governor; Gr, elected by State Grange.

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At the foundation of the Medical College the following resolution establishing a Medical College Council and determining its functions was adopted by the Board of Trustees of Cornell University.

Resolved, That for the purpose of making recommendations to the Board of Trustees or the Executive Committee in relation to the business management of the Medical College there be established, and there is hereby established, a Medical College Council which shall consist of seven members, to wit: the President of the University (who shall be ex-officio chairman), the Dean of the Medical College, and three trustees to be elected by the Board of Trustees or the Executive Committee, who shall be appointed, one for one year, one for two years, and one for three years, and their successors to be appointed for three years, and their successors to be the Faculty, who shall be appointed, one for one year and one for two years, and their successors to be appointed for two years, and that all appointments to fill vacancies be made for unexpired terms.

The Council at present consists of the following members:

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Instructor in Chemistry.

THOMAS A. MULCAHY, M.D.,
Instructor in Clinical Surgery, Defartment of Laryngology, and Rhinology.

HENRY R. MULLER, A.B., M.D., Instructor in Pathology.

CLAY RAY MURRAY, M.D.,

Assistant in Clinical Surgery.

CHARLES HALPIN NAMMACK, M.D., Instructor in Clinical Medicine.

JOSEPHINE B. NEAL, A.B., M.D.,

Assistant in Medicine.

Jose F. Nonidez, Sc.D., Instructor in Anatomy.

JOHN M. O'CONNOR, M.D., Instructor in Operative Surgery.

EMIL OSTERBERG, Instructor in Chemistry.

ROYCE PADDOCK, M.D., Assistant in Medicine.

ARTHUR PALMER, A.B., M.D.,
Instructor in Clinical Surgery, Department of Laryngology and Rhinology.

RUSSELL H. PATTERSON, M.D.,
Assistant in Clinical Surgery and Applied Anatomy.

EDWIN PYLE, M.D.,
Assistant in Clinical Surgery.

DAVID RAPPORT, M.D.,

Assistant in Physiology.

JOHN H. RICHARDS, M.D.,
Instructor in Clinical Pathology and in Medicine.

HENRY B. RICHARDSON, A.B., M.D., Instructor in Medicine.

MAX S. ROHDE, A.B., M.D.,

Instructor in Clinical Surgery, Department of Urology.

JOSEPH C. ROPER, M.D., Instructor in Pediatrics.

MORTON RYDER, A.B., M.D..
Instructor in Clinical Medicine.

JESSE F. SAMMIS, M.D.,
Instructor in Pediatrics.

MORRIS K. SMITH, M.D., Instructor in Surgery.

WILLIAM L. SNEED, M.D.,
Instructor in Applied Anatomy.

WILLIAM L. SOULE, A.B., M.D., Instructor in Anaesthesia.

JUNIUS W. STEPHENSON, M.D.,
Instructor in Clinical Medicine, Department of Neurology.

Instructor in Clinical Medicine, Department of Neurolo Lewis Stevenson, M.D.,

PHILIP MOEN STIMSON, A.B., M.D., Instructor in Pediatrics.

LAWRENCE W. STRONG, M.D.,
Instructor in Gynecological Pathology.

JOHN E. SUTTON, A.M., M.D., Assistant in Surgery.

FENTON TAYLOR, M.D.,
Instructor in Clinical Surgery.

RUTH A. THOMAS, A.B., C.P.H., Instructor in Bacteriology.

JULIUS J. VALENTINE, M.D.,
Instructor in Clinical Surgery, Department of Urology.

GEORGE W. VANDERGRIFT, A.M., M.D.,
Instructor in Clinical Surgery, Department of Ophthalmology.

W. MORRIS WEEDEN, A.B., M.D., Instructor in Surgery.

Instructor in Neuro-Pathology and in Clinical Medicine, Department of Neurology.

FACULTY OF MEDICINE

CHARLES WEYMULLER, M.D.,
Instructor in Clinical Pediatrics.

IRA WILENS, M.D.,

Instructor in Obstetrics and Gynecology.

HERVEY C. WILLIAMSON, M.D., Instructor in Obstetrics and Gynecology.

MAY G. WILSON, M.D., Instructor in Pediatrics.

WILLIAM A. WILSON, M.D.,

Instructor in Clinical Surgery, Department of Urology.

Lucius A. Wing, B.S., M.D., Instructor in Clinical Surgery.

DAN HITER WITT, M.D., Instructor in Medicine.

OFFICERS OF ADMINISTRATION.

WALTER L. NILES, M.D., Dean.

J. S. FERGUSON, M.D., Secretary of the Faculty.

J. THORN WILLSON, Managing Clerk.

JESSIE P. ANDERSEN, the Dean's Secretary.

JOSEPHINE GENUNG NICHOLS, PH.B., Librarian.

WILLIAM DUNN, Photographer.

HAROLD S. BELCHER, M.D., College Physician.

JEAN H. PATTISON, M.D., College Physician.

THE CLINIC.

Director of the Clinic George H. Bigelow, M.D.

Department of Medicine.

Chief of Clinic
SAMUEL BRADBURY, M.D.,
Physicians

Nancy Jenison, M.D.

CONNIE M. GUION, M.D.
LESLIE T. GAGER, M.D.
DAVID P. BARR, M.D.
DAN H. WITT, M.D.
HARMON A. VEDDER, M.D.
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FRANCIS T. WILLIAMS, M.D.
HARRY H. HAMILTON, M.D.
HENRY B. RICHARDSON, M.D.
EDWIN P. RUSSELL, M.D.
ANNE M. BELCHER, M. D.
LEILA A. COSTON, M.D.

WALTER H. BRUNDAGE, M.D.

Attending Physicians

JENNINGS S. LINCOLN, M.D.

ARTURO MARTINEZ, M.D.

HAROLD STEWART BELCHER, M.D.

JEAN H. PATTISON, M.D.

BENJAMIN H. ARCHER, M.D.

J. RANDOLPH QUINN, M.D.,

GEORGE KING, M.D.

EDWARD KLECKNER, M.D.

JOHN C. HOWARD, M.D.

FRANK MACBETH ENDE, M.D.

ABRAHAM MOSS, M.D.

Department of Medicine, Gastro-Enterology.

Physicians.

HAYNES HAROLD FELLOWS, M.D. (In charge)

SYDNEY WEINTRAUB, M.D.

JOHN CAMPBELL HOWARD, M.D. S. C. JOHNSON, M.D. NANCY JENISON, M.D.

Attending Physicians
DOUGLASS PALMER, M.D.
EDWIN P. RUSSELL, M.D.
FRANK C. HENRY. M.D.

Department of Medicine (Diabetes)

Physician

HENRY JAMES SPENCER, M.D.

Department of Medicine (Endocrine).

Physician
FRANCIS T. WILLIAMS, M.D.

Department of Medicine (Arthritis).

Physician

RUSSELL L. CECIL, M.D.

Department of Medicine (Protein).

Physician
HARRY L. ALEXANDER, M.D.
Attending Physicians
ROYCE PADDOCK, M.D.

Department of Medicine (Tuberculosis).

Physician
EDWARD P. EGLEE, M.D.

Department of Medicine (Cardiac).

Physician
HAROLD E. B. PARDEE, M.D.

Department of Medicine (Health).

Physician

HARRY H. HAMILTON, M.D.

Attending Physicians
Anna M. Richardson, M.D. Arturo Martinez, M.D.
Anne M. Belcher, M.D.

Department of Pediatrics.

Physician
PHILIP MOEN STIMSON, M.D.

Attending Physician

LUCY PORTER SUTTON, M.D.

GEORGE C. LUDLOW, M.D.

Department of Surgery.

Chief of Clinic FENTON TAYLOR, M.D.

> Surgeon EDWIN PYLE, M.D.

Attending Surgeon RUSSELL H. PATTERSON, M.D.

FACULTY OF MEDICINE

Department of Obstetrics and Gynecology.

Chief of Clinic
JOHN F. McGRATH, M.D.

Surgeon

S. Schmerzler, M.D. James H. Heyl, M.D.

LYNN L. FULKERSON, M.D.

Attending Surgeons

JOHN D. DICKSON, M.D. ROBERT F. PEREZ, JR., M.D.

Louis Biro, M.D.

Department of Urology.

Chief of Clinic WILLIAM A. WILSON, M.D.

Surgeon

ORLOW C. SNYDER, M.D.

Attending Surgeons

MIGUEL ALVAREZ, M.D. WILLIAM R. DELZELL, M.D. THOMAS J. KIRWIN, M.D. PAUL M. BUTTERFIELD, M.D. LISLE B. KINGERY, M.D.

Department of Neurology.

Chief of Clinic
THOMAS K. DAVIS, M.D.

Physician Lewis D. Stevenson, M.D.

George H. Hyslop, M.D. Mary Sturges, M.D. John M. McKinney, M.D. Attending Physicians
CLAYTON L. WOOD, M.D.
THEODORE W. NEUMAN, M.D.
LAURENT FEINIER, M.D.

Department of Neurology (Speech Clinic)

Attending Physician OLGA NEYMANN, D.D.S.

Department of Psychiatry.

Chief of Clinic SANGER BROWN, 2d, M.D.

Physician
RALPH P. FOLSOM, M.D.

BERTRAM D. LEWIN, M.D. ARTHUR G. LANE, M.D.

Attending Physicians
CHARLES G. McGAFFIN, M.D.
RICHARD H. PAYNTER, M.D.

Department of Dermatology.

Chief of Clinic OSCAR L. LEVIN, M.D.

Physician Andrew J. Gilmour, M.D.

WILLIAM HOWARD SCHIMPF, M.D.

FRANCIS JOHN OSBORNE, M.D.

FRANCIS JOHN OSBORNE, M.D.

Department of Otology.

Chief of Clinic GEORGE B. McAuliffe, M.D.

Surgeon
GERVAIS W. MCAULIFFE, M.D.

CHARLES DEPPING, M.D. OTIS P. CHAPMAN, M.D. Attending Surgeons CARL FORNELL, M.D. HAROLD BLAUVELT, M.D.

HARRY P. McTague, M.D.

Department of Laryngology and Rhinology.

Chief of Clinic WALTER C. MONTGOMERY, M.D.

Surgeons

ARTHUR PALMER, M.D. THOMAS A. MULCAHY, M.D.

Attending Surgeons JAMES A. CLARK, M.D. WILLIAM J. JACKSON, M.D. CHARLES L. CHASINS, M.D. SAUL KNOPF, M.D.

Department of Orthopedic Surgery.

Chief of Clinic ARTHUR H. CILLEY, M.D.

> Surgeon JOHN S. WARE, M.D.

Attending Surgeons

IRVIN BALENZWEIG, M.D. LESLIE BROWN, M.D.

Department of Roentgenology.

Chief of Clinic RALPH E. HERENDEEN, M.D.

Surgeon ALBERT B. FERGUSON, M.D.

Department of Ophthalmology.

Chief of Clinic BERNARD SAMUELS, M.D.

Surgeons GEORGE W. VANDEGRIFT, M.D. CHARLES ARTHUR DRAKE, M.D.

Attending Surgeons

MILTON L. BERLINER, M.D. JAMES A. CLARK, M.D. E. P. SHERMAN, M.D. EDWARD M. OVERTON, M.D. SAMUEL FORSTER, M.D.

> Department of Dentistry. Surgeon Louis Wack, D.D.S.

Department of Drugs and Supplies.

Pharmacist GUSTAVE T. RUCKERT, PH.G. Assistant Pharmacist CHARLES LENZ, PH.G.

GENERAL STATEMENT

GENERAL STATEMENT.

The Medical Department of Cornell University was made possible by the gift to the University of a commodious and fully equipped building designed for medical instruction, and by the bestowal of funds for the maintenance of a vigorous school of medicine.

The objects of this school are:

(1) To develop physicians of the best type, and

(2) To conduct researches into the nature and cure of disease.

The school offers educational and research facilities to all undergraduates and graduates in medicine who are properly qualified to benefit from these opportunities and who are in sympathy with these aims.

The Main College Building comprises a Medical School and Dispensary, with principal entrance on First Avenue, opposite Bellevue Hospital, and occupies the entire block between Twenty-seventh and Twenty-eighth Streets on First Avenue. The building is devoted to the Departments of Anatomy, Clinical Pathology, Chemistry, Pathology, Bacteriology, Physiology, Medicine and their laboratory equipment.

The Loomis Laboratory (founded 1886 by the same munificent hand) serves the purpose of undergraduate instruction, in connection with the laboratories in the College building. It has also been reorganized as a research laboratory, and special departments have been established in bacteriology, physiological chemistry, experimental medicine and pharmacology.

The Cornell University Medical College Clinic, located in the main College building, is fully equipped for purposes of instruction.

The attendance in the Clinic averages about 335 patients daily and annually includes about 18,000 new patients. The organization is such as to bring the Clinic into closest touch with the Laboratory and research facilities of the College.

The Department of Roentgenology as well as the Laboratory of Clinical Pathology, is in direct connection with the Clinic, and by co-operation and co-ordination of work their services are placed at the constant disposal of the various other departments of the Clinic for the diagnosis and investigation of disease and for purposes of instruction.

The Library is supplied with current periodicals in German, French, English and Italian, which include nearly all the more important journals in the field of medical science, and the back files of these periodicals are fairly complete. There is also a students' library of recent textbooks. Every effort is made to maintain a library commensurate with the needs of the College. A special reading room is provided for the convenience of students. A trained Librarian is in attendance to supply references and direct their work.

In addition to the College Library, students enjoy certain privileges at the Library of the New York Academy of Medicine, 17 West 43rd Street, the second largest medical library in the United States, and at the various public libraries of the city.

New York Hospital.—The Medical College, through the courtesy of the Governors of the New York Hospital, has long been accorded certain privileges for instruction in its wards; but on the first of January, 1913, a definite arrangement was established between Cornell University and the New York Hospital, through the donation to the hospital of a generous fund by Mr. George F. Baker, a Governor of the Hospital, upon the condition that thereafter the pathological and half the entire medical and surgical services of the institution should be definitely assigned to the Cornell University Medical College for the advancement of its teaching and research.

By this most advantageous arrangement the University nominates the Visiting Staff of its division and the Laboratory Staff and secures the admission of its students to the wards as clinical clerks, thereby enabling the College to make a definite provision in its course of instruction and research for work in the New York Hospital. Furthermore, the Laboratory Staffs of the different departments of the Medical College are placed at the service of the Hospital for the purpose of extending its scientific work.

The hospital service thus assigned to the College comprises 100 beds. This service is exceedingly active. It includes several thousand acute and emergency cases brought in annually from a large ambulance and dispensary district.

The medical staff of this hospital assigned to the Cornell University Medical College has been organized as outlined in the departmental announcements for medicine and surgery.

The Professors of Medicine and Surgery are directly responsible to the University for the conduct of the instruction in the New York Hospital.

Bellevue Hospital.—This hospital, located on First Avenue, directly opposite the Main College building, has 1,200 beds, and receives 24,000 patients annually.

The hospital is organized in four divisions, one of which has been placed by the Trustees of the hospital at the disposal of the Faculty of the Cornell University Medical College for medical instruction. The services thus intrusted to the College include, continuously, 90 medical beds, 90 surgical beds, 60 to Urology, a Neurological Service, and for one-half the year 54 obstetrical beds, together with equal privileges with the other three divisions, giving continuous opportunity for instruction and research in the additional wards devoted to the treatment of alcoholic diseases, tuberculosis and the psychopathic diseases. There are also available 60 beds for instruction in Gynecology by members of the staff assigned to this duty by the Cornell University Medical College.

The visiting staff of the Second, or Cornell Division is drawn entirely from the Faculty and instructors of the College, and by co-operation with the Medical Board of the Hospital this division has been organized with a view to the best interests of the patients, as well as with a view to furnishing adequate facilities for instruction. The students spend a considerable portion of the fourth year in this hospital as clinical or surgical "clerks," and during the preceding years frequent clinical instruction is conducted in its wards, as fully described under "Details of the Plan of Instruction."

GENERAL STATEMENT

While Bellevue Hospital is provided with an elaborate Department of Pathology of its own, the scope of the hospital work of the Cornell Division is broadened by the intimate relation existing between the laboratories of the Medical College and the medical service of the hospital. In addition to the staff provided by the hospital, the College maintains a corps of research workers and special assistants who conduct their routine examinations in extension laboratories equipped by the College in rooms adjacent to the wards of the hospital, and who consummate their major investigations in the more completely equipped laboratories of the College building.

The Professors of Medicine and Surgery are directly responsible to the University for the conduct of the instruction in Bellevue Hospital.

Memorial Hospital.—Through the generosity of the late Dr. James Douglas, who provided the Hospital an endowment for the study and treatment of cancer and allied diseases, the Memorial Hospital became affiliated in 1914 with Cornell University Medical College.

The conditions upon which this union was consummated place upon Cornell University Medical College the responsibility for the medical and surgical activities of the Hospital, subject however, so far as administrative action is concerned, to the approval of its Board of Managers. Cornell University Medical College is required to approve the five medical members of the Board of Managers of the Memorial Hospital and to nominate their successors in case of vacancies, and to name the medical and surgical staff, subject to the approval of the Board of Managers of the Hospital.

In accordance with these conditions, and with the approval of the Board of Managers of the Hospital, the Medical Staff has been organized as follows:

James Ewing, M.D., President of the Medical Board, Director of Cancer Research, Pathologist.

WILLIAM B. COLEY, M.D., Vice-President of the Medical Board, Professor of Cancer Research, Attending Surgeon.

WILLIAM S. STONE, M.D., Clinical Director.

STANLEY R. BENEDICT, Ph.D., Director Department of Chemistry.

WILLIAM A. DOWNES, M.D., Attending Surgeon.

BURTON J. LEE, M.D., Attending Surgeon.

BENJAMIN S. BARRINGER, M.D., Attending Surgeon, Urological Department. DOUGLAS QUICK, M.D., Attending Surgeon.

WILLIAM P. HEALY, M.D., Attending Gynecologist.

RALPH E. HERENDEEN, M.D., Physician to Roentgen Ray Department.

NATHAN GREEN, M.D., Assistant Surgeon.

FRANK E. ADAIR, M.D., Assistant Surgeon.

DAVID H. M. GILLESPIE, M.D., Assistant Surgeon.

Bradley L. Coley, M.D., Assistant Surgeon. Frederick M. Johnson, M.D., Assistant Surgeon.

ARCHIE L. DEAN, JR., M.D., Assistant Surgeon, Urological Department.

LLOYD F. CRAVER, M.D., Assistant Physician.

CONDE DES. PALLEN, M.D., Assistant Gynecologist.

CHARLES J. GOELLER, M.D., Adjunct Assistant Surgeon, Urological Department.

R. GARFIELD SNYDER, M.D., Adjunct Assistant Physician.

CHARLES W. STROBELL, M.D., Clinical Assistant.

GEORGE E. BINKLEY, M.D., Clinical Assistant.

THOMAS L. BENNETT, M.D., WILLIAM G. DORAN, M.D., H. CLIFTON LUKE, M.D., W. MORRIS WEEDEN, M.D., Anaesthetists.

GIOACCHINO FAILLA, Physicist.

EDITH H. QUIMBY, M.A., Assistant Physicist.

RAYMOND G. HUSSEY, M.D., Associate in Pathology.

RUTH THEIS, A.B., Chemist.

KANEMATSU SEGUIRA, A.M., Associate Chemist.

ELISE S. L'ESPERANCE, M.D., Serologist.

JOHN C. TORREY, M.D., Bacteriologist.

HALSEY J. BAGG, Ph.D., Research Fellow in Biology.

The John E. Berwind Maternity Clinic.—An affiliation having been consumated between the John E. Berwind Maternity Clinic and Cornell University Medical College, the medical direction of the Clinic is placed under the control of Cornell. The medical staff including the resident and house staffs are appointed by the Clinic, only on nomination by the Medical College.

Cornell students are definitely assigned to the Clinic for practical instruction under the direction of the Professor of Obstetrics and Gynecology.

Cornell students having been provided for, vacancies in the student staff will be filled by appointment. Application for such assignments should be made to the Superintendent of the Clinic at 125 East 103rd Street, New York City.

The Russell Sage Institute of Pathology.—The Russell Sage Institute of Pathology has been affiliated with the Second Medical (Cornell) Division of Bellevue Hospital since 1913. Endowed by Mrs. Russell Sage in 1907, it has provided funds for research work in pathology and medicine. Laboratory space has been generously given by the trustees of Bellevue Hospital and clinical facilities have been furnished by the Cornell Medical Division. The Institute has constructed and equipped a respiration calorimeter and has maintained a metabolism ward adjacent to the general wards of the division. The research workers have been members of the hospital staff and have assisted in the care of patients and the instruction of students. The metabolism ward, chemical laboratories and calorimeter furnish unusual facilities for teaching the diseases of metabolism.

The staff is as follows:

Graham Lusk, Ph.D., Scientific Director.
Eugene F. Du Bois, M.D., Medical Director.
David P. Barr, M.D., Research Fellow.
Henry B. Richardson, M.D., Research Fellow.
Edward Tolstoi, M.D., Chemist.
Harry W. Rabinowitz, B.S., Chemist.
S. F. Soderstrom, Calorimeter Technician.
Mary Duggan, R.N., Head Nurse.

GENERAL STATEMENT

The New York Nursery and Child's Hospital.—By courtesy of the Trustees of this Hospital, Cornell Students are there instructed in Pediatrics. The Hospital offers splendid opportunities for the study of infants and children.

There are seventy two beds on the Pediatric service, and in addition there

is in the same building an active maternity service.

The out patient department has an average yearly attendance of 8,000 infants and children, with special classes in Feeding; Malnutrition; Syphilis; Eczema and Cardiac diseases. Both the indoor and outdoor services are utilized for teaching purposes. The members of the teaching staff have official connection with the hospital.

The Neurological Institute.—By courtesy of the Neurological Institute section work in Nervous Diseases is offered to third and fourth year students in the wards and Out-Patient Department of this hospital, the students being assigned for ward work in small sections during the third and fourth years. The Neurological Institute is a hospital of considerable size, devoted to the care of nervous diseases and possessing a complete equipment for neurological examinations, diagnosis and treatment.

Psychiatric Institute, Ward's Island.—The Professor of Psychiatry is Director of the Psychiatric Institute, which is the teaching and research center for the entire New York State Hospital system. The lecture rooms, pathological material and clinical facilities of the Institute are available for the teaching of medical students.

Manhattan State Hospital, Ward's Island.—This hospital for the care and treatment of mental diseases, accommodates over 5,000 patients. Through the courtesy of the Superintendent the Professor of Psychiatry is enabled to utilize this clinical meterial for bedside study of patients and practical exercises and demonstrations conducted in the wards of the hospitals.

Other Hospitals.—In addition to the above, members of the Faculty of Cornell University Medical College hold appointments in various hospitals and dispensaries of the city, and are thus enabled to utilize for teaching purposes a great quantity and variety of clinical material. This is used from time to time as necessity or opportunity arises. The major part of the bedside and clinical instruction is, however, purposely conducted in Bellevue Hospital, which is directly opposite the College, and in New York Hospital, which is conveniently located on Fifteenth Street, and may be reached by surface cars in fifteen to twenty minutes.

REOUIREMENTS FOR ADMISSION

The Faculty of the Cornell University Medical College are of the opinion that candidates for admission to the medical profession should possess the liberal culture and general education implied by a college degree in Arts or Science. Since 1907 a standard of admission which requires the baccalaureate degree or its equivalent has been rigidly maintained. Without attempting to enter into a discussion of the relative advantages of the courses in Science or Arts, the President and Trustees of Cornell University adopted the requirements advised by the Faculty of the Medical College for admission to the course leading to the degree of M.D. and only the following classes of candidates are admitted to the Cornell University Medical College:

- I. Graduates of approved colleges or scientific schools; or-
- II. Seniors in good standing in approved colleges or scientific schools upon condition that their faculty will permit them to substitute the first year in the Cornell University Medical College for the fourth year of their college course, and will confer upon them the bachelor's degree* upon the satisfactory completion of the years's work; or—
- III. Persons who give evidence by examinations that they have acquired an equivalent education to that signified by a bachelor's degree, and training sufficient to enable them to profit by the instruction offered in the Medical College.
- All Candidates for Admission, whether of group I, II, or III, shall have satisfactorily completed in an approved college, at least the following minimum in—
 - 1. Physics, 8 semester hours, including laboratory.
- 2. Chemistry, 12 semester hours (8 hours of inorganic, including both qualitative and quantitative analysis and 4 hours of organic chemistry). The course should have included at least fifty hours of didactic work not less than eighty hours of laboratory work in inorganic chemistry; and at least 70 hours each of laboratory work in qualitative and in quantitative analysis. In addition, the candidate shall have satisfactorily completed courses in at least 36 hours of didactic and 80 hours of laboratory work in organic chemistry.
 - 3. Biology (Zoology), 6 semester hours, including laboratory work.
 - 4. English, 6 semester hours.
 - 5. Modern language, 6 semester hours-French, German, Italian or Spanish.
- 6. Two additional semester hours of college credit will be required in each of the three subjects, Biology, English and Modern language, in which no introductory high school course was offered for admission to college.

^{*}No student under the clause is permitted to enter the second year of the medical curriculum without the bachelor's degree obtained after at least three years of undergraduate college work. Clause II is intended to provide for those students who by specially directed or by specially proficient work accomplish the essential requirements for a B.S. or B.A. degree during three years of College residence.

REQUIREMENTS FOR ADMISSION

- 7. All applicants residing within 50 miles of New York City are required to present their credentials in person by appointment at the office of the Secretary. All applicants must submit with their application a recent photograph.
- IV. All students entering Cornell University Medical College are required to provide themselves with a satisfactory microscope.
- V. Not more than seventy-five students will be admitted to the first year in Medicine; approved applicants for advanced standing will be admitted to subsequent years only when the number registered falls below sixty. Not more than sixty students will be registered in the second, third and fourth year classes.
- VI. The number of students in this Medical College having been limited that its advantages may be equalized to all parts of the state and country, not more than five students from any one college will be admitted to the first year class.

The Trustees felt that it was unfair to refuse the exceptional student of unusual abilities who has obtained independently an education equivalent to that implied by a degree from a college or scientific school, and there will therefore be examiners appointed from the faculties in the different colleges of Cornell University to determine the qualifications of such as may apply for admission under Rule III of these requirements. The committee in charge of the administration of this rule consists of the President of the University and the Deans of the Faculties of Arts and Sciences and of Medicine. The only instance of admission under Rule III yet encountered involved a graduate of a foreign institution of collegiate rank which grants no degrees.

APPLICATIONS FOR ADMISSION

All applications and communications are to be addressed to the Secretary of the Medical College from whom blank forms of application for admission may be obtained.

Prospective students will find it to their advantage to file their application early. The number of admissions being limited, to insure favorable consideration, applications for admission to the first year should be received not later than March 1st, and should in all cases be accompanied by a transcript of the college record to date. The required letters of recommendation from two science professors under whom the student has recently worked should be forwarded at the same time. A photograph must accompany the application.

Inasmuch as all students of medicine in New York State are required by law to have previously had an adequate preliminary education, and as this preliminary education must be certified as sufficient by the State Educational Department, it is advisable that applicants for admission send their credentials to the Secretary of the Medical College in properly attested form as promptly as possible, that the secretary may then obtain the requisite "medical student's certificate" from the State authorities.

ADMISSION TO ADVANCED STANDING

Applicants for advanced standing must have met in full the requirements for admission (page 26), and must have already attended the legally required number of sessions in an approved regular medical college. Whenever vacancies arise* applicants thus qualified may be admitted to the Cornell University Medical College under the following conditions:

- 1. A properly attested certificate of actual attendance at a registered Medical College for the full number of years of medical study for which time credit is asked must be presented and approved.
- 2. A certificate showing that the student has satisfactorily completed in an approved medical college the work of all required subjects of the years for which Cornell credit is asked must be presented and approved.
- 3. Subject credit may be granted on presentation and approval by the heads of departments of properly attested certificates stating the courses already completed in an approved medical college with the number of hours, didactic and laboratory, devoted thereto, together with the name of the instructor.
- 4. In the absence of approval of the certificate called for in the preceding paragraph (number 3) subject credit for advanced standing will be granted only by examination in all of the subjects previously pursued by the class to which admission is desired. For a list of the subjects for examination see page 84.

Examinations for admission to advanced standing are conducted by heads of departments and may be taken with the class at the end of the session in June or prior to the opening of the session in September. For dates of examinations, see calendar, page 5.

ADMISSION TO SPECIAL COURSES

Graduates in medicine, or students who desire to pursue a special course without graduation, are admitted to registration as special students, after approval by the head of the department conducting the course. Such special courses do not count in any way as part of the four years' course required of candidates for the degree of doctor in medicine. The courses offered to graduates are outlined on pages 88 to 91. Further information regarding such courses, fees, etc., may be obtained by addressing the Secretary of the Cornell University Medical College, 477 First Avenue, New York City.

REQUIREMENTS FOR LICENSE TO PRACTICE MEDICINE IN THE STATE OF NEW YORK

Graduates of Cornell University are admitted unconditionally to the examinations for license to practice medicine in the State of New York as well as all other states. Further information as to the nature of the requirements of the

*The three upper classes are limited to sixty students each. See Rule V, page 27.

REQUIREMENTS FOR ADMISSION

New York State law regulating the practice of medicine may be obtained by consulting the handbook issued for gratuitous distribution by the New York State Education Department at Albany, N.Y.

All requirements for admission to examinations for licensure should be filed with the State Education Department at least one week before examination.

Examinations for license to practice medicine in this State will be held as follows:

1924		1925		
Jan.	28-31	Jan.	26-29	
May	19-22	May	18-21	
June	23-26	June	22-25	
Sept.	22-25	Sept.	21-24	

Places.

New York, Albany, Syracuse, Buffalo.

NATIONAL BOARD OF MEDICAL EXAMINERS

Graduates of the Cornell University Medical College are admitted to the examinations of this Federal Board, whose certificates are accepted by the Surgeons-General of the Army, Navy and Marine Corps of the United States and by the Boards of Medical Licensure of many States. The dates and places of examination will be announced as promulgated by the Board.

CHARGES FOR INSTRUCTION

First Year.	
Matriculation	. \$10.00
Tuition	. 300.00
Laboratory fees	. 35.00
·	\$345.00*
Second Year	
Tuition	\$300.00
Laboratory fees	35.00
	\$335.00*
Third Year	
Tuition	\$300.00
Laboratory fees	35.00
	\$335.00*
Fourth Year	
Tuition	\$300.00
Laboratory fees	25.00
Final Examination fee	25.00
	\$350.00*

^{*}An advance payment of \$50.00 on account of tuition is required on acceptance of an application for admission, and is not returnable.

The matriculation fee is payable only once, on entrance.

The final examination fee is payable on registering for graduation. All other fees are payable at the beginning of the term, but in special cases the tuition fee may be paid semi-annually in advance. Owing to the limitation in size of the classes, no refund nor rebate will be made in any case.

No remission of laboratory fees will be made because of previous instruction elsewhere

in the subjects.

Each student is required to pay the clerk of the College the following amounts to cover breakage in the Laboratories and Dispensary departments:

1st year, Laboratory and Dispensary	\$10.00
2d year, Laboratory and Dispensary	10.00
3d year, Laboratory and Dispensary	10.00
4th year, Laboratory and Hospital	10.00

These deposits, less the amount charged for breakage, will be returned at the end of each year.

All fees for instruction are paid to the office of the Managing Clerk. Tickets must be taken out and paid for at the beginning of the session. For Fees of Special Students see pages 89 to 92.

For Fees of Graduate Students see page 93.

LOCATION AND MODE OF ACCESS

The main building of Cornell University Medical College is located on First Avenue between 27th and 28th Streets.

The street railway cars of the Third Avenue System on First Avenue pass the College building. The crosstown cars on Twenty-third and Thirty-fourth Streets, at First Avenue, pass within five blocks of the College buildings. Convenient stations of the Subway lines are located at Twenty-eighth Street and Fourth Avenue, at Twenty-eighth Street and Broadway, and Twenty-eighth Street and Seventh Avenue. The nearest stations of the Manhattan Elevated Railroad are at Twenty-eighth Street on the Third and Sixth Avenues lines and at Twenty-third Street on the Second Avenue line.

GENERAL STATEMENT OF THE PLAN OF INSTRUCTION.

The function of a Medical Department in a University is primarily to produce practitioners of medicine of the highest possible efficiency. The school must include among its students not only those whose life is to be spent in the the treatment of disease, but those who intend to become teachers of medicine or of the branches of natural science upon which medicine depends, as well as those who devote their energies to advancing these sciences by research and to work connected with the public service. The Medical Department of the University has therefore developed into a school whose students are to be prepared to become practitioners of medicine and surgery, teachers of these subjects and their subsidiary branches, and investigators of biological problems which pertain to human disease and "preventive medicine." To reach this ideal, and to relieve the Medical Department from instruction in subjects which belong to natural science in general and not strictly to the medical curriculum, it is necessary that the students should have received the best possible preliminary education which must include the mental training implied by the baccalaureate degree.

In arranging the course of study the subjects pertaining to pure, rather than applied, science are grouped in the first year of the medical course, those of the applied science in the early part of the second year, and the so-called clinical subjects in the second, third and fourth years.

The fourth year of the medical curriculum is devoted largely to clinical instruction in the various aspects of medicine and surgery, with bedside instruction and ample opportunity for the careful study of cases by continuous service in the hospital wards. Some opportunity for elective courses is allowed, but all students must take at least the minimum amount of the subjects which form the basis of the general practitioner's usefulness, and all are thus necessarily prepared for successfully undergoing the usual competition for appointments as hospital internes, positions in the public service of the State and Nation, and examinations for licensures by the States.

Any student of exceptional fitness, however, after having completed the first three years' work and who then desires to devote the major part of his time to one or more of the laboratory departments may do so during the fourth year. Such an arrangement can be made only with the approval of the Dean and the heads of the departments concerned. The departments in which the student is engaged shall then determine whether his work has given such satisfaction as would warrant the degree at the end of the year.

Custom and experience are in favor of a long summer vacation, and the utilization of the cool months alone for teaching. The Faculty have therefore decided on a period of thirty-two actual working weeks exclusive of the time occupied by holidays and examinations. This working period is

divided into three terms the first of eleven, the second of ten, and the third of eleven weeks. By this arrangement it is possible to obtain a certain degree of "concentration" in the teaching of those subjects in which that plan is advantageous, and it is thus also possible to maintain a proper sequence in the curriculum.

The extensive opportunity for continuous ward work afforded by the curriculum of the third and fourth years in no wise replaces the valuable work afforded by hospital interneship, but is in a way preparatory thereto. Every graduate of this medical school is expected to pursue the usual interne service in some hospital, our graduates having little or no difficulty in obtaining the best positions under competitive examinations in addition to those appointments directly and indirectly controlled by this College. Without prolonged hospital training no physician should attempt to practice nor to teach; and no specialist can be worthy of the name who has not had the broad foundation insured by such a service.

For details of the course see Departmental Announcements, which follow, and the scheduled curriculum, pages 74 to 83.

DETAILS OF THE PLAN OF INSTRUCTION.

THE DEPARTMENT OF ANATOMY.

CHARLES R. STOCKARD, M.S., Ph.D., M.D., Sc.D., Professor of Anatomy. CHARLES V. MORRILL, A.M., Ph.D., Associate Professor of Anatomy. ROBERT CHAMBERS, JR., A.M., Ph. D., Professor of Microscopic Anatomy. George Papanicolaou, Ph.D., M.D., Assistant Professor of Anatomy. WILLIAM L. SNEED, M.D., Instructor in Applied Anatomy. Jose F. Nonidez, Sc.D., Instructor in Anatomy. Louis Hausman, A.B., M.D., Instructor in Neuro-Anatomy. Alice L. Brown, A.M., Assistant in Anatomy. Winifred Kirk, A.B., Assistant in Anatomy. Raymond O. Hitchcock, M.A., Assistant in Anatomy. Russel H. Patterson, B.S., M.D., Assistant in Applied Anatomy.

I. Morphology.

Structure of Man.—This course considers the structure of the various organs and systems of the human body in the light of their variations and evolutions. The relationship of the parts of the organs and systems are also explained by numerous facts gathered from experimental morphological studies on lower vertebrates.

The chief aim is to instill into the student the idea that animal structures are constantly changing and varying, yet are so definite as to lend themselves to logical analysis.

Laboratory, 40 hours (elective), and demonstration conferences, 22 hours (optional).

Text-books.—Wiedersheim's Comparative Anatomy and Bau des Menschen, Wilder's History of Man, together with special works and monographs on the subject.

Professor Stockard.

II. Embryology and Histology.

The work in *embryology* presupposes a general knowledge of the subject, particularly that of the early development of the chick. It embraces a thorough study of the development of the mammalian embryo in the light of our knowledge of the evolution of the human body. Malformations resulting from developmental disturbances are broadly considered. A feature of the course is the close correlation with the course in *gross anatomy*.

The work in histology includes the histogenesis and microscopic structure of all of the organs of the human body with the exception of the central nervous system (see neuro-anatomy). Emphasis is laid on the relation of structure to function.

The tissues are studied both in the fresh condition and by means of stained sections and frequent drills are given for a rapid identification of their diagnostic features. A part of the course is devoted to histological technique.

Laboratory course and lectures—219 hours, October to March. Required of all first year students.

Text-books.—Prentiss, Laboratory Manual and Text-book of Embryology; Lewis, Text-book of Histology; Keith, Human Embryology and Morphology; Schäfer, Microscopic Anatomy; Minot, Laboratory Embryology; Keibel and Mall, Human Embryology; Broman, Normal and Abnormal Embryology.

Professor Chambers, Dr. Nonidez and assistants.

III. Neuro-Anatomy.

A laboratory course on the gross and microscopic anatomy of the human central nervous system. Especial emphasis is laid on the more important pathways and their functions.

Laboratory and demonstrations, 88 hours. Required of all first year students during the third term.

Text-books.—Ranson, Anatomy of the Nervous System; Villiger's Brain and Spinal Cord; Herrick's Introduction to Neurology and any of the text-books of anatomy used in Course IV.

Associate Professor Morrill and Drs. Nonidez and Hausman.

IV. Gross Anatomy of the Human Body.

This is taught by means of laboratory exercises and dissections held in the dissecting room at stated hours.

The following are the courses required:

COURSE I. THE UPPER EXTREMITY.

COURSE II. THE HEAD AND NECK.

Course III. THE LOWER EXTREMITY.

Course IV. THE THORAX.

COURSE V. THE ABDOMEN AND PELVIS.

The required work in each of the above courses includes:

- (a) Dissection of the part.
- (b) Demonstrations, study, and recitations upon dissected and prepared specimens, and from standard text-books.
 - (c) An oral examination at the completion of each course.

Total laboratory hours, 338 (minimum). First and second terms of the first year.

COURSE VI. A DEMONSTRATION COURSE. Optional for the first-year students. Demonstrations upon the cadaver, models and dissected preparations amplifying the courses in dissection during the first and second terms of the first year.

COURSE VII. STUDY ROOM COURSE IN LIVE ANATOMY.

Since the ultimate aim of dissection is to acquaint the student not merely with the arrangement of structures in the cadaver, but with the facts of the living body, this course follows as a natural sequence to the work of the dissecting room. Optional to first-year students.

Course VIII. Dissection Review.

The work covers a repetition of Courses I-V, giving an opportunity for advanced dissection. Optional to students of the second, third or fourth year. Afternoons.

COURSE IX. TOPOGRAPHICAL ANATOMY.—A study of the relations and topography of the parts of the body by means of frozen sections. Cleared preparations and living models are also used. Members of the class must submit a number of drawings made from the sections.

Laboratory, 36 hours. Required during the first term of second year.

Text-books.—Cunningham's Manual of Practical Anatomy, two vols.; Cunningham's Text-book of Anatomy; Spalteholz's Atlas of Human Anatomy; Morris' Human Anatomy; Gray's Anatomy; Piersol's Human Anatomy.

Professors Stockard, Morrill and assistants.

V. Applied Anatomy.

This course is given during the second term of the third year. It is conducted as a laboratory exercise and aims to demonstrate the important facts or regional and topographical anatomy as applied to the practice of medicine and surgery.

Laboratory, 60 hours (optional).

Text-books.—Woolsey's Applied Surgical Anatomy; Davis' Applied Anatomy.

Dr. Sneed and assistants.

VI. Elective Courses Preparatory to the Specialties.

Optional for students of the third and fourth years. These courses offer a thorough review of the embryology, histology and gross anatomy of the following organs and systems:

- (a) The eye.
- (b) The ear.
- (c) The face and neck, including especially the nose and accessory sinuses, the mouth and salivary glands, pharynx and larynx, thyroid and parathyroid glands.
 - (d) The genito-urinary system, male and female.
 - (e) The brain and spinal cord.
 - (f) The thorax and abdomen.
 - (g) The extremities, especially the joints and their mechanics.

Laboratory, 40 hours. Professor Stockard and instructors.

VII. Elective Courses for Advanced Students.

COURSE I. GENERAL HISTOLOGY.—This course will comprise a study of the various types of tissues which form the several organs of the vertebrate body. The structures will be studied not only from the mere morphological standpoint, but the various biological problems involved will be taken into consideration. The close relationship between structure and function will be elucidated.

Twenty lectures, March to June.

Registration not later than January. Professor Chambers.

COURSE II. THE ANATOMY OF THE INFANT.—A course of lectures amplified by demonstrations and the study of preparations.

Twenty lectures arranged for in advance. Professor Stockard.

COURSE III. DEVELOPMENT ARRESTS AND STRUCTURAL DEFICIENCIES.—
A discussion of the imperfections in development which may occur during various periods from the maturation of the germ cells, fertilization of the egg on through embryonic and fetal development.

Fifteen lectures. Professor Stockard.

COURSE IV. EXPERIMENTAL EMBRYOLOGY.—These lectures begin with the history of the subject and the various aspects of the problems concerned. The experimental analysis of embryological processes is then considered from the several points of view.

Twenty lectures with conferences considering the recent literature of the subject. March to June. Professor Stockard.

COURSE V. REGIONAL ANATOMY.—This course will comprise a thorough review by means of dissections, demonstrations and reading of the gross anatomy, histology and development of selected regions of the body and of organs and organ systems.

Laboratory and demonstration, 3 half days a week for two months.

Associate Professor Morrill and assistants.

COURSE VI. FOURTH-YEAR ELECTIVES.—The Department of Anatomy will arrange a schedule of work to fit individual cases for a limited number of fourth-year students desiring to devote the major part or all of their elective time. Such work will be designed, in cases where sufficient time is available, to equip the student to become a laboratory assistant.

VIII. Anatomical Research.

To students desiring to pursue research in anatomical subjects the equipment of the entire department is available. Members of the staff will gladly assign subjects and direct the progress of advanced work of this type. The work may be elected by students who enter with advanced credits, or by any student who has completed the preliminary courses in descriptive anatomy, histology and embryology. The course is also open to graduates in medicine or biology.

PHYSIOLOGY.

GRAHAM LUSK, Ph.D., Professor of Physiology.
DAYTON J. EDWARDS, Ph.D., Associate Professor of Physiology.
HARRY J. DUEL, JR., Ph.D., Instructor in Physiology.
DAVID RAPPORT, M.D., Assistant in Physiology.

^{*}Optional.

First Year. Nervous System and Respiration.

Lectures laboratory, recitations and a weekly seminar. Physiology of the muscle and nerve, the central nervous system, the special senses and respiration.

Second Year. Physiology and Nutrition.

Lectures, laboratory, recitations and seminar. Circulation, secretion, digestion, internal secretions and metabolism.

SUMMARY.

	First Year.	Second Year
Lectures	33 hours	66 hours
Recitations	44 hours	27 hours
Seminary		11 hours
Laboratory	99 hours	99 hours

Text-books.—Starling's, Howell's or Macleod's Physiology; Lusk, Science of Nutrition; Wiggers, Circulation in Health and Disease; Collateral Reading, Scientific Journals.

CHEMISTRY.

STANLEY R. BENEDICT, Ph.D., Professor of Chemistry. HUGH E. MORROW, A.B., Instructor in Chemistry. JEANNETTE ALLEN BEHRE, Ph.D., Instructor in Chemistry. EMIL OSTERBERG, Instructor in Chemistry. NATHAN F. BLAU, Ph.D., Associate in Chemistry. MARJORIE HUPPER, A.B., M.S., Assistant in Chemistry.

The instruction in chemistry is concentrated in the first year, and is arranged upon the assumption that the student is already thoroughly grounded in the principles of chemistry and in physics. The object aimed at is to impart that fundamental knowledge of organic and physiological chemistry which is necessary to the comprehension of the bearings of chemistry upon physiology, pharmacology and medicine.

Lectures.—There will be two lectures a week during the first term upon physical chemistry. The elements of the subject will be presented with special emphasis upon the properties and reactions of colloids, and the theory of indicators. Roentgen and radium rays are also discussed.

During the second term two lectures a week will be devoted to organic and physiological chemistry. The lectures will discuss groups of compounds of especial biological importance, emphasizing especially the carbohydrates, purines, amino acids and the fats.

In the third term two lectures weekly will be •devoted to Physiological Chemistry.

Recitations and Conferences.—There will be one recitation weekly during the second and third terms. These recitations are largely in the nature of conferences.

Laboratory Work.—During the first term there will be one session weekly of three and one-half hours in physical chemistry. The experiments are designed to familiarize the student with the fundamental properties of electrolytes and colloids, and to study the phenomena of osmosis and dialysis. Methods of hydrogenion determination are also studied.

In the second term there will be one session weekly of two and one-half hours in organic chemistry. This work will be directed mainly to the preparation and examination of organic compounds of biological importance, and will furnish practice on those points in which laboratory manipulations are desirable.

During the third term there will be three three-hour laboratory sessions in physiological and clinical chemistry. This course will include the study of the reactions of the carbohydrates, fats and proteins; of the composition of the salivary, gastric, pancreatic and intestinal secretions and the bile, and their actions in digestion; of the fæces, urine, blood and milk; and of the examination of pathological fluids, concretions, stomach contents, etc. The study of metabolism will receive particular attention. The arrangement of this course is in coaptation with those in physiology and in clinical pathology.

In the laboratory courses each student is supplied with all apparatus and chemicals required.

Chemical Pathology.—Elective in the fourth year. A practical course in the chemical analysis of the blood. The laboratory work is supplemented by informal lectures and discussions. Hours to be arranged.

One period a week will be devoted to a seminar in which recent literature on blood chemistry will be discussed.

Research.—The laboratory will be open during "optional hours" to students of any year who desire to prosecute advanced work or research, subject to the regulations of the office.

SUMMARY.

	First Year.
Recitations	 32 hours
Laboratory	 162 hours
Lectures	 75 hours

Text-books.—McCollum, Organic Chemistry, for students of Medicine and Biology; Moore, Laboratory Manual; Hawk, Practical Physiological Chemistry, fifth edition. For Collateral Reading:—Mathews, Physiological Chemistry; Wells, Chemical Pathology.

PHARMACOLOGY.

ROBERT ANTHONY HATCHER, Ph.G., M.D., Professor of Pharmacology. HARRY GOLD, M.D., Instructor in Pharmacology.

Work in this department is offered during the second year.

Materia Medica and Pharmacy.

1. Elementary Pharmacy, Toxicology and Principles of Prescription Writing.—The work in this course occupies four hours a week during the first trimester. Twenty hours will be devoted to the consideration of crude drugs, and making pharmacopæial preparations of the different pharmaceutical classes (such as extracts, pills, etc.,) by the students. Each laboratory exercise will be preceded by an informal discussion of the work to be done with special reference to its relation to therapeutics.

The remainder of the course will be devoted to prescription writing and incompatibilities.

Pharmacology.

- II. Lectures.—During the second and third trimesters forty-five hours will be devoted to lectures, conferences and written reviews on Systematic Pharmacology. The lectures will be illustrated in part by demonstrations and by tracings taken from research experiments. Professor Hatcher.
- III. Laboratory.—Concurrently with the lectures on Systematic Pharmacology, ninety hours will be devoted to the laboratory study of the subject. The experiments are designed to illustrate a wide range of pharmacologic actions, the more important drugs being considered with reference to their actions on different structures. Professors Hatcher and Dr. Gold.
- IV. Research. Elective.—Students will be encouraged to conduct original research under the supervision of the members of the staff. Such work affords a valuable insight into pharmacologic methods, and assists in the formation of a correct estimate of the original work of others.

SUMMARY.

	Second Year.
Lectures	32 hours
Laboratory	126 hours

Text-books.—Sollmann, A Text-book of Pharmacology; A Laboratory Guide in Pharmacology.

DEPARTMENT OF PATHOLOGY.

General Pathology, Pathological Anatomy, Experimental Pathology,

Chemical Pathology.

James Ewing, M.D., Professor of Pathology.

Otto H. Schultze, M.D., Professor of Medical Jurisprudence.

Elise S. L'Esperance, M.D., Assistant Professor of Pathology.

Raymond G. Hussey, M.D., Assistant Professor of Pathology.

Charles S. B. Cassassa, M.D., Instructor in Pathological Anatomy.

Lewis Stevenson, M.D., Instructor in Neuro-Pathology.

WILLIAM W. Beattie, M.D., Instructor in Pathological Anatomy.

Beatrice Farrance, M.D., Instructor in Pathological Anatomy.

Beatrice Farrance, M.D., Assistant in Neuro-Pathology.

GENERAL PATHOLOGY.

Facilities.—The department of pathology occupies the main part of the fourth floor of the college building, in which are a class room and working museum, demonstration room for pathological anatomy with refrigerating plant, a preparation room for pathological histology, four private laboratory rooms for officers of the department, an animal hospital, and the library.

Pathological material is drawn from New York Hospital, Bellevue Hospital and the City Morgue, Memorial Hospital for Cancer and Allied Diseases, and other Hospitals.

The museum contains a selected collection of 3,000 specimens illustrating most of the common and many rare pathological lesions. It is especially rich in lesions of bones and in tumors.

The histological cabinets contain about 20,000 slides arranged anatomically and cross-indexed for special diseases. There are also 100 sets of demonstration slides for undergraduate teaching purposes.

The library contains 12,000 bound volumes of current periodicals in English, French, German and Italian, and 5,000 selected reprints and monographs.

A volume is issued jointly by the Departments of Pathology, Bacteriology, and Hygiene, in which are collected the main studies coming from these laboratories. The Department of Pathology with the collaboration of heads of other departments conducts the work of the Huntington Fund for Cancer Research of the Memorial Hospital, and at appropriate times issues reports of these studies.

Instruction.—The course of instruction in pathology begins in the second term (January) of the second year, with lectures and gross and microscopical demonstrations, illustrating degeneration, inflammation, repair of tissue, and the infectious granulomas. At the same time the student observes the external phenomena of disease in demonstrations conducted by the Departments of Medicine and Surgery, reads about them in text-books, and prepares recitations on these topics. Coincidently, biweekly demonstrations of gross pathological material collected from autopsies are conducted. The introduction of each topic is made by individual demonstration of museum specimens followed by the study of microscopic sections. Further coordination of work is accomplished by having the course in bacteriology proceed at the same time. The third term is occupied by the subject of tumors, and diseases of the lungs. The first term of the third year is devoted to Special Pathology of the organs, constitutional diseases, gynecological pathology, and neuropathology.

Pathological Anatomy is continued through the three terms of the course in general pathology, and in the fourth year the student performs autopsies. Various elective courses are offered in the latter portion of the fourth year.

SYNOPSIS OF COURSES.

General Pathology.—Lectures, gross and microscopical demonstrations in:
(a) Degeneration, Inflammation, Regeneration, Granulomas, 70 hours.

Required in second term of second year. (b) Tumors and Special Pathology of Lungs, 88 hours. Required in third term of second year. (c) Special Pathology of Constitutional Diseases, etc. Gynecological Pathology, Neuropathology, 88 hours. Required in first term of third year. Professors Ewing and L'Esperance and Drs. Beattie, Stevenson and Fairbanks.

Pathological Anatomy.—Demonstrations of gross lesions in material collected from autopsies, gross pathological diagnosis, pathogensis of symptoms and lessions. 84 hours. Required in second and third years. Professor Schultze, Drs. Cassassa and Dodge.

Autopsy Technique.—Section teaching at Morgue. Required in fourth year. Dr. Cooper.

Medico-legal Pathology.—The medico-legal relations of pathology are extensively illustrated in the material collected in the morgue and in the museum, and special attention is devoted to this subject in the third and fourth years. Professor Schultze, Drs. Cassassa and Dodge.

Recitations, Examinations.—Written recitations are conducted monthly throughout the year. Written and practical examinations are held at the end of the second year and at the termination of the course.

Electives.—In the latter part of the fourth year the student may return to the laboratory and pursue advanced courses in several fields to be determined on consultation. The following courses are specifically recommended.

- 1. Pathological technique.
- 2. Tumor diagnosis and General Oncology.
- 3. Gynecological Pathology.
- 4. Dermatopathology.
- 5. Neuropathology.
- 6. Surgical Pathology.
- 7. Special pathology and study of groups of cases with the production of a thesis.

Most of these elective courses will require the student's entire time for one to three months but may be continued into the summer.

Special Students and Special Degrees.—Opportunity is afforded to a limited number of students to engage in original research in selected topics under the direction of an instructor. The student must contract to devote his entire time, in the usual sense, to the pursuit of the problem, and the results of the work may be published under the auspices of the department. The work may be pursued in the college laboratories, in the Loomis Laboratory, at the New York Hospital, or at the Memorial Hospital in cancer research.

Under the conditions laid down in the Graduate School of Medicine, the student may obtain the degree of Ph.D. in Pathology.

CANCER RESEARCH.

Since 1904 the work of the Huntington Fund for Cancer Research has been located in the laboratories of Cornell University Medical College under the general direction of the Department of Pathology, and with the collaboration of heads of other departments. Later through the support of Dr. James Douglas, and the co-operation of the Board of Managers, it has been extended to the laboratories of the Memorial Hospital. A laboratory building accommodating pathology, chemistry and physics has recently been erected.

The organization of this work includes pathology, Prof. Ewing; bacteriology, Prof. Torrey; biophysics, Prof. Hussey; chemistry, Prof. Benedict; biology, Prof. Stockard: pathology, Prof. L'Esperance.

Clinical studies in the diagnosis, natural history, and treatment of neoplastic diseases are conducted in the hospital by the members of the Staff. The general conduct of the ward service is in charge of Dr. Wm. S. Stone, Clinical Director. The Radium Department is in charge of Dr. Douglas Quick. Other special departments are conducted by Drs. B. S. Barringer, Burton J. Lee, William P. Healey and others. The radium laboratory possesses four grams of radium metal, supplied by the National Radium Institute through the late Dr. James Douglas. The radium laboratory is in charge of Mr. Gioacchino Failla, Phycisist, and four assistants. The X-ray Department is in charge of Dr. Ralph E. Herendeen, Roentgenologist. Prof. Walter F. Wilcox is Consulting Statistician.

SUMMARY.

	Second Year.	Third Year.	Four Year.
General Pathology	70 hours		
Special Pathology	88 hours	88 hours	
Pathological Anatomy	62 hours	22 hours	
Autoney Technics			Variable

BACTERIOLOGY.

WILLIAM J. ELSER, M.D., Professor of Bacteriology.

ARTHUR F. COCA, M.D., Assistant Professor of Immunology.

ROBERT A. COOKE, M.D., Assistant Professor of Applied Immunology.

GEORGE W. WHEELER, M.D., Assistant Professor of Bacteriology.

ELLA F. GROVE, Assistant in Immunology.

RUTH A. THOMAS, A.B., C.P.H., Assistant in Bacteriology.

ROBERT KOCH, M.D., Assistant in Bacteriology.

I. Bacteriology.

The subject is taught in the second year in two parts. Part I includes the preparation of culture media, the principles of sterilization and disinfection, the methods of isolation and differentiation of bacterial species

and a study of their bio-chemical behaviour. Part II includes a detailed study of the pathogenic bacteria; special attention being paid to their relation to diseases of man. This work is supplemented by lectures and conferences dealing with the theoretical phases of bacteriology and immunology.

During the fourth year 11 hours are devoted to the study of the bacteriology of wounds; pathogenic anaerobic bacteria and the efficiency of common antiseptics receive special consideration.

II. Immunology.

- A. A didactic course in immunology with demonstrations is given to second year students following the course in bacteriology.
- B. An elective* laboratory course in immunology and serum study is offered to fourth year students. This course is designed primarily to familiarize the student with the fundamental immunological and serological principles. It includes also the technique involved in the recognized clinical and forensic application of those principles, viz., Widal, precipitin, Wassermann and Schick test, reciprocal blood tests preliminary to transfusion, etc.

III. Applied Immunology.

- A. A lecture course to third year students is given in conjunction with the Department of Medicine on diagnosis and specific treatment of human hypersensitiveness.
- B. An elective clinical course in applied immunology is offered to fourth year students in conjunction with IIB. This course consists of the practical study of various forms of hypersensitiveness in man, ample material for which is provided in the special clinic, two evenings (4 hours) for one week at the New York Hospital.

SUMMARY.

	Second Year.	Fourth Year.
Bacteriology	 150 hours	
Immunology	 22 hours	60 hours*

^{*}Elective. In 1924-25 this course will be required in the second year.

MEDICINE.

LEWIS A. CONNER, M.D., Professor of Medicine.
WALTER L. NILES, M.D., Professor of Clinical Medicine.
EUGENE F. DUBOIS, M.D., Associate Professor of Medicine.
NELLIS B. FOSTER, M.D., Associate Professor of Medicine.
WILLIAM C. THRO, M.D., Professor of Clinical Pathology.
FRANK S. MEARA, M.D., Professor of Clinical Medicine.
ALEXANDER LAMBERT, M.D., Professor of Clinical Medicine.
CHARLES E. NAMMACK, M.D., Professor of Clinical Medicine.
MALCOLM GOODRIDGE, M.D., Professor of Clinical Medicine.
DAVID P. BARR, M.D., Assistant Professor of Medicine.
RUSSELL L. CECIL, M.D., Assistant Professor of Clinical Medicine.

ARTHUR L. HOLLAND, M.D., Assistant Professor of Clinical Medicine. SAMUEL BRADBURY, M.D., Assistant Professor of Clinical Medicine. ROBERT A. COOKE, M.D., Assistant Professor of Applied Immunology. RALPH G. STILLMAN, M.D., Assistant Professor of Clinical Pathology. CARY EGGLESTON, M.D., Assistant Professor of Clinical Medicine. MAX EINHORN, M.D., Lecturer on Diseases of the Stomach. HARRY A. BRAY, M.D., Lecturer on Tuberculosis. HAROLD E. B. PARDEE, M.D., Associate in Medicine. JOHN H. RICHARDS, M.D., Instructor in Clinical Pathology and Medicine. NANCY JENISON, M.D., Instructor in Medicine. WALTER H. BRUNDAGE, M.D., Instructor in Medicine. HARRY L. ALEXANDER, M.D., Instructor in Medicine. DAN H. WITT, M.D., Instructor in Medicine. HENRY B. RICHARDSON, M.D., Instructor in Medicine. HORACE S. BALDWIN, M.D., Instructor in Medicine. CHARLES H. NAMMACK, M.D., Instructor in Clinical Medicine. LESTER T. GAGER, M.D., Instructor in Medicine. ASA L. LINCOLN, M.D., Instructor in Medicine. MORTON RYDER, M.D., Instructor in Clinical Medicine. JOSEPHINE B. NEAL, M.D., Assistant in Medicine. ROYCE PADDOCK, M.D., Assistant in Medicine.

The course in Medicine is begun in the second trimester of the second year and is continued uninterruptedly through the third and fourth years. Instruction is given by means of didactic lectures, laboratory exercises, amphitheatre clinics, recitations, section classes in the wards and in the College Clinic and clinical clerkships in the wards of Bellevue and New York Hospitals.

SECOND YEAR.

Introductory Clinics.—The subject of Medicine is introduced in the second trimester by a series of elementary clinics designed to acquaint the student with the simpler and more obvious aspects of important and common types of disease and to stimulate in him the habit of close observation. These clinics are held by Professors Conner and DuBois once a week during the second and third trimesters.

Recitations.—The student is required to read upon the subjects considered in each of the clinics and to attend one recitation a week dealing with these subjects.

Physical Diagnosis.—During the third trimester the principles of physical diagnosis are presented in demonstrations and conferences by Doctors Pardee and Nammack, and the students, in sections, are given training in the various methods of physical examination. Chiefly normal subjects are examined and the importance of a thorough familiarity with normal physical signs under varying conditions is insisted on.

Ward Classes.—In the third trimester the introductory clinics are supplemented by bedside teaching to sections in the wards of Bellevue Hospital by Dr. C. H. Nammack.

THIRD YEAR.

Lectures.—During the first and second trimesters one lecture a week is given by Professor Conner upon the general symptomatology of disease. Each of the commoner and more important symptoms is considered in detail with special reference to the physiological processes involved.

Physical Diagnosis.—This subject is continued in the third year during the second and third trimesters. The class is divided into small groups, each of which in turn is assigned to service in the medical department of the College Clinic. The students, under careful supervision, are expected to take histories and to make and record physical examinations; and systematic instruction in pathological physical diagnosis is given by Professor Foster and Doctors Brundage, Jenison and Gager.

Clinics.—In the first and third trimesters general medical clinics are held once a week in the College Amphitheater by Professor Conner. At these Clinics are presented such ambulatory types of medical diseases as are usually not seen in the hospital wards. In the third term, also, a medical clinic is held once a week in Bellevue Hospital for both the third and fourth year students by Professor DuBois and his associates.

Recitations.—In this year the subject of Medicine is covered systematically and thoroughly by recitations which are held three times a week during the second and third trimesters. Professor Barr and Doctors Richards, Cecil and Richardson.

Therapeutics.—Instruction in therapeutics, under the charge of Professor Goodridge, will be given throughout the third year, and will comprise:

Lectures, dealing with the theories and modes of therapy, including serum and vaccine threapy, the treatment of hay fever and bronchial asthma, various metabolic disturbances, and the therapeutic management of definite types of disease, so designed as to direct the student in the application of his pharmacologic knowledge to therapeutic problems. Professors Goodridge and Foster, and Doctors Eggleston, Cooke, Cecil and Lincoln. 32 hours.

Recitations and Conferences, which will deal with the treatment of the acute infections. Professor Goodridge. 16 hours.

Practical Demonstrations, to small sections, in the wards of Bellevue Hospital, of such therapeutic procedures as are suitable for this form of instruction. Professor Goodridge. 16 hours.

Clinical Clerkships: In the fourth year, students will be assigned to the wards of Bellevue Hospital, to serve as clinical clerks, for periods of four weeks each, during two weeks of which especial emphasis will be given to instruction in various therapeutic procedures.

Clinical Pathology.—The introductory required course, under the charge of Professor Thro, is given in the first trimester of the third year. It consists of one hundred and ten hours of lectures and laboratory work. This time is devoted to the teaching and the practical application of methods for

the examination of urine, blood and blood serum, sputum, exudates and transudates, spinal fluid, gastric contents, faces, and for the bacteriological examination of clinical material.

During the remainder of the third year and in the fourth year the students perform laboratory tests on patients assigned them in the clinics and hospitals, where they are supervised by instructors in the Department of Medicine.

In the latter part of the fourth year students have the opportunity to elect work in Clinical Pathology.

FOURTH YEAR.

Clinical Clerkships.—The time allotted to medicine in the last year is devoted entirely to practical work in the wards of New York and Bellevue Hospitals and to elective subjects. Each student is required to serve for a period of two months as clinical clerk in the medical wards; the time being divided equally between New York and Bellevue Hospitals. During this period his entire day is spent in the wards and clinical laboratories. A certain number of patients are assigned for study to each student. Under careful supervision he takes the histories, makes physical examinations, performs the various necessary laboratory examinations and records the progress of the cases. He is expected to be present at all post mortem examinations and to attend the clinical pathological conferences. Each afternoon teaching rounds for the entire group on duty are made by some members of the Attending Staff.

At the New York Hospital, in addition to the routine ward teaching by Professors Conner and Foster, a weekly conference by Professor Foster is held with the group upon disorders of metabolism and their treatment, as exemplified by cases in the wards; a course of eight periods on the fluoroscopic investigation of the gastro-intestinal tract is given by Doctor Holland, and a part of one afternoon of each week is devoted by Doctor Pardee to the study of cardiac arrhythmias and the interpretation of electrocardiographic and polygraphic records

At Bellevue Hospital, in addition to the routine ward teaching by Professors DuBois, Niles and Goodridge, the following special exercises are held:

- a. Neurological clinic, once a week, Professor Kennedy.
- b. Clinical-pathological conference, once a week.
- c. Medical Clinic, one a week. Cases are presented by the student clerks and are discussed by the staff, and the results of experimental work done by the research members of the staff are demonstrated in connection with the cases studied.
- d. Library conferences. The group on duty meet once a week in the college library where instruction is given in the use of the reference library and in looking up the literature of special subjects.

Elective Studies.—The latter part of the fourth year is available for elective work. For courses offered see page 66.

Graduate Study and Research.—The clinics and laboratories of Bellevue and New York Hospitals are available for special study and research to a limited number of physicians possessing suitable training.

Bellevue Hospital Clinic.—The Russell Sage Institute of Pathology is especially equipped for the investigations of problems of basal metabolism. The calorimeter is operated in conjunction with a metabolism ward and there is a chemical research laboratory for the study of problems connected with respiration and the gases of the blood.

New York Hospital Clinic.—The clinical laboratory and chemical laboratory are closely allied with the wards and offer excellent facilities for the study of the chemical aspects of disease. Special lines of research may also be carried on in the serological and bacteriological laboratories of the Hospital in conjunction with clinical observation in the wards. These laboratories have been used notably in the study of the anæmias, nephritis, and protein sensitization.

SUMMARY.

Medicine.

	Second Year.	Third Year.	Fourth Year.
Lectures	. 4 hours	21 hours	
Recitations	. 21 hours	63 hours	
Clinics	. 42 hours	55 hours	
Clinical Clerkships			336 hours*
Sections	. 32 hours	20 hours	
Ther	apeutics.		
Lectures		32 hours	
Recitations		16 hours	,
Sections		16 hours	

Clinical Pathology.

Laboratory, recitations & lectures 110 hours.

SURGERY.

CHARLES L. GIBSON, M.D., Professor of Surgery.

JOHN A. HARTWELL, M.D., Associate Professor of Surgery.

HENRY H. M. LYLE, M.D., Associate Professor of Surgery.

GEORGE WOOLSEY, M.D., Professor of Clinical Surgery.

JOHN ROGERS, M.D., Professor of Clinical Surgery.

IRVING S. HAYNES, M.D., Professor of Clinical Surgery.

BURTON J. LEE, M.D., Professor of Clinical Surgery.

JAMES MORLEY HITZROT, M.D., Professor of Clinical Surgery.

POL CORYLLOS, M.D., Professor of Clinical Surgery.

PERCY R. TURNURE, M.D., Assistant Professor of Clinical Surgery.

JOSEPH P. HOGUET, M.D., Assistant Professor of Clinical Surgery.

^{*}Including Theraputics.

JOHN C. A. GERSTER, M.D., Assistant Professor of Clinical Surgery. HAROLD E. SANTEE, M.D., Assistant Professor of Clinical Surgery. GUILFORD S. DUDLEY, M.D., Assistant Professor of Clinical Surgery. ELISE S. L'ESPERANCE, M.D., Assistant Professor of Pathology. CHARLES E. FARR, M.D., Assistant Professor of Clinical Surgery. RALPH G. STILLMAN, M.D., Assistant Professor of Clinical Pathology. GEORGE W. HAWLEY, M.D., Lecturer on Fractures. JAMES H. KENYON, M.D., Instructor in Clinical Surgery. EDWARD C. BRENNER, M.D., Instructor in Operative Surgery. LEILA C. KNOX, M.D., Instructor in Surgical Pathology. MORRIS K. SMITH, M.D., Instructor in Surgery. ABRAHAM J. BELLER, M.D., Instructor in Operative Surgery. JOHN M. O'CONNOR, M.D., Instructor in Operative Surgery. JOSEPH E. KING, M.D., Instructor in Surgery. FENTON TAYLOR, M.D., Instructor in Clinical Surgery. W. MORRIS WEEDEN, M.D., Instructor in Surgery. LUCIUS A. WING, M.D., Instructor in Clinical Surgery. WILLIAM L. SOULE, M.D., Instructor in Anesthesia. NELSON K. BENTON, M.D., Instructor in Operative Surgery. H. H. JOHNSON, M.D., Instructor in Operative Surgery. JOHN E. SUTTON, M.D., Assistant in Surgery. FENWICK BEEKMAN, M.D., Assistant in Clinical Surgery. RICHARD W. BOLLING, M.D., Assistant in Clinical Surgery. BRADLEY COLEY, M.D., Assistant in Clinical Surgery. CLAY RAY MURRAY, M.D., Assistant in Clinical Surgery. EDWIN PYLE, M.D., Assistant in Clinical Surgery. HERBERT BERGANINI, M.D., Assistant in Clinical Surgery. RUSSELL H. PATTERSON, M.D., Assistant in Clinical Surgery. HOWARD N. COOPER, M.D., Assistant in Surgical Pathology. PENELOPE MARSH, M.D., Bacteriologist, Department of Surgery.

In the second year the introductory course in surgery consists of a series of lectures and recitations, clinics in the College Dispensary and sections in the New York, Bellevue and St. Mary's Hospitals.

In the third year recitations are continued upon regional surgery; the class is instructed in sections at Bellevue and St. Luke's Hospitals in history taking and methods of surgical examination and diagnosis, three hours a week for one term, one hour a week in minor surgery in the College Clinic during the second term and four and a half hours a week at Memorial Hospital in neoplasms.

In the second and third terms clinics for the whole class are held weekly at Bellevue, New York and St. Luke's Hospitals. Thirty-three lectures are given by the Professors of Surgery.

Operative Surgery. The course in charge of Dr. John C. A. Gerster

consists of recitations and operative work on the cadaver. Each member of the class performs all the principal operations.

In the fourth year students spend eight weeks as clinical clerks in the wards of the New York and Bellevue Hospitals. They also receive clinical instruction in small groups in several hospitals and dispensaries on the special branches of urology, gynecology and orthopedics. In the last two months all the work is purely elective and the students may supplement their work in surgery by clinical electives and by taking some of the group of surgical lectures which are offered annually.

HOSPITAL WORK

The Cornell University Medical College through its control of the First Surgical Service of the New York Hospital, the Second Surgical Division of the Bellevue Hospital and the Memorial Hospital and with clinical privileges at St. Luke's and St. Mary's Hospitals, possess every facility necessary for the efficient teaching of practical surgery and surgical pathology.

The Staff of Instruction at the New York Hospital is at present organized as follows:

NEW YORK HOSPITAL, CORNELL (FIRST SURGICAL) DIVISION.

CHARLES L. GIBSON, M.D., Professor of Surgery, Attending Surgeon.

BURTON J. LEE, M.D., Professor of Clinical Surgery, Associate Attending Surgeon.

JAMES M. HITZROT, M.D., Professor of Clinical Surgery, Associate Attending Surgeon.

CHARLES E. FARR, M.D., Assistant Professor of Clinical Surgery, Assistant Attending Surgeon.

RALPH G. STILLMAN, M.D., Assistant Professor of Clinical Pathology, Assistant Director Department of Pathology.

George W. Wheeler, M.D., Assistant Professor of Bacteriology, Bacteriologist.
W. Morris Weeden, M.D., Instructor in Surgery, Assistant Attending Surgeon.
ELISE S. L'ESPERANCE, Assistant Professor of Pathology, Pathologist.

CLAY RAY MURRAY, M.D., Assistant in Clinical Surgery, Deputy Assistant Surgeon.

WILLIAM L. SOULE, M.D., Instructor in Anesthesia, Anesthetist.

The work is carried on in collaboration with the additional appointees from the Department of Pathology.

The division consists of about 60 surgical beds and a variable proportion of the children's service. The service is acute in character, and is particularly rich in the graver emergency and traumatic material.

Attached to this division is also a large Dispensary (Tuesday, Thursday and Saturday mornings), which furnishes valuable material for instruction and includes departments in urology, orthopedics, gynecology and dental surgery.

The resources of the Pathological Department under Professor Elser afford valuable opportunities for the study of surgical pathology, and an intimate connection between the two departments is maintained.

Instruction consists of bedside instruction, diagnosis clinics, operative and post-operative clinics, practical instruction in sections (with utilization of the Dispensary clinical material) and clinical clerkships.

Schedule of Surgical Clinical Clerkships

Morning Schedule

Week	Group I.	Group II.	Group III.	Group IV.
1st	Operating Room*	Anesthesia	Gynecology**	Staff Bacteriologists
2nd	Staff Bacteriologists	Operating Room*	Anesthesia	Gynecology**
3rd	Gynecology**	Staff Bacteriologists	Operating Room*	Anesthesia
4th	Anesthesia	Gynecology**	Staff Bacteriologists	Operating Room*

^{*}Including emergency operations, 7-11 P.M.

Afternoon Schedule

Hour	Monday	Tuesday	Wednesday	Thursday	Friday .	Saturday
11 A.M.	Dr. Wheeler Bacteriology of course only.				Dr. Murray	
12 N.	Dr. Soule First Monday only.	Dr. Wheeler First Tuesday only.				
2	Dr. Weeden	Dr. L'Esperance	Dr. Weeden	Dr.L'Esperance	Dr. Weeden	
3	Field		Dr. Murray		Rounds Dr. Gibson	
4	Rounds	Rounds Dr. Lee	Special Lectures	Rounds Dr. Hitzrot	Social Service Dept. 2nd Friday only.	

^{**}Dispensary, Tuesday, Thursday and Saturday at 11 A.M.

Each section of students, for four weeks, as scheduled on page 45, is subdivided into four smaller groups and the course is planned to give a rotating service changing weekly. The work of the students is similar to that of the junior internes; but carried out under careful supervision. In addition, special instruction is given by members of the Attending Staff, the Staffs of the Pathological Laboratory and of the Out Patient Department in special work.

All patients in the hospital service are assigned to the student groups who become responsible for all the histories, physical examinations, laboratory investigations and observations on treatment and convalescence after operation.

A special course in Surgical Pathology is given on two days a week by Dr. L'Esperance.

BELLEVUE HOSPITAL, CORNELL (SECOND SURGICAL) DIVISION.

- JOHN A. HARTWELL, M.D., Associate Professor of Surgery, Director of Surgery.
- George Woolsey, M.D., Professor of Clinical Surgery, Consulting Surgeon.

 John Rogers, M.D., Professor of Clinical Surgery, Visiting Surgeon.
- HAROLD E. SANTEE, M.D., Assistant Professor of Clinical Surgery, Visiting Surgeon.
- Guilford S. Dudley, Assistant Professor of Clinical Surgery, Assistant Visiting Surgeon.
- ELISE S. L'ESPERANCE, M.D., Assistant Professor of Pathology, Surgical Pathologist.
- FENTON TAYLOR, M.D., Instructor in Clinical Surgery, Assistant Visiting Surgeon.

 JOSEPH E. KING, M.D., Instructor in Surgery, Assistant Visiting Surgeon.
- BRADLEY COLEY, M.D., Assistant in Clinical Surgery, Adjunct Assistant Visiting Surgeon.
- EDWIN PYLE, M.D., Assistant in Clinical Surgery, Surgeon to Out Patients and Adjunct Assistant Visiting Surgeon.
- HERBERT BERGANINI, M.D., Assistant in Clinical Surgery, Surgeon to Out Patients and Adjunct Assistant Visiting Surgeon.
- RUSSELL H. PATTERSON, M.D., Assistant in Clinical Surgery, Surgeon to Out Patients and Adjunct Assistant Visiting Surgeon.
- JOHN E. SUTTON, M.D., Assistant in Surgery, Surgeon to Out Patients and Adjunct Assistant Visiting Surgeon.
- HOWARD N. COOPER, Assistant in Surgical Pathology, Department of Surgery, Assistant Surgical Pathologist.
- Penelope Marsh, Bacteriologist, Department of Surgery, Surgical Bacteriologist.

The Division consists of 90 surgical beds in addition to those devoted to surgical pediatries, genito-urinary diseases and gynecology, the hospital instruction in which is outlined under their respective departments. The service is so arranged that the Associate Professor and a Clinical Professor are on continuous duty throughout the College year.

The hospital interne staff perform the routine duties of the wards, and are assisted in history taking, dressing, etc., by the surgical clerks, who spend their entire day in the wards during their period of clerkship, these privileges being extended exclusively to the students of the Cornell University Medical College.

Surgical Clerkships.—Intensive ward teaching is done under this head in the wards of Bellevue Hospital during the fourth year. The students are assigned in sections for four weeks each. They are under the direction of the Associate Professor aided by the corps of instruction.

Each student devotes his entire day to the work continuously for four weeks. He is assigned to the study of a certain number of patients, and is enabled to follow the complete course of the disease from the admission of the patient to his discharge. In the event of death he is present at the autopsy should one be performed.

In this way the student has an opportunity to follow to a conclusion a large number of surgical affections, and he is instructed in the proper methods of surgical history taking, surgical physical examination, surgical dressings, and operative surgery as seen at the operating table. He is also instructed in the laboratory study, including bacteriology, of the blood, urine, faces, exudates, and transudates. This laboratory work is done under the direction of the staff in the laboratories connected with the hospital, and is under the immediate charge of the Surgical Pathologist to the Division. Each student spends 24 hours in the pathological laboratory, where he is instructed in a series of lesions illustrating the cases under his observation.

By this method of instruction, each student comes into intimate contact with a large number of surgical patients, and is required to make a complete study of each one from every standpoint. He has constantly at his service two or more of the teaching staff to guide him in his work, and impress on him the proper methods of observation and study.

SUMMARY.

	Second Year.	Third Year.	Fourth Year.
Lectures	32 hours.	33 hours.	
Recitations	10 hours.	63 hours.	
Clinics	20 hours.	69 hours.	
Sections	12 hours.	70 hours.	
Operative Surgery		55 hours.	
Clinical Clerkships			336 hours.
Elective			Variable

Text-books.—Arnhurst's Text-book of Surgery; Rose and Carless, Surgery; Choyce, A System of Surgery; Thompson and Miles, Manual of Surgery, 6th Edition; Gould, Surgical Diagnosis.

Collateral Reading.—Lexer-Bevan, General Surgery; Stimson, Fractures and Dislocations; Binnie, Operative Surgery, 7th Edition; Binnie, Regional Surgery; Lehrbuch der Chirurgie, Garré and Borchard.

OBSTETRICS AND GYNECOLOGY.

George Gray Ward, M.D., Professor of Obstetrics and Gynecology.

Harold C. Bailey, M.D., Associate Professor of Obstetrics and Gynecology.

Lilian K. P. Farrar, M.D., Associate Professor of Obstetrics and Gynecology.

Hervey C. Williamson, M.D., Instructor in Obstetrics and Gynecology.

John F. McGrath, M.D., Instructor in Obstetrics and Gynecology.

Francis W. Gravelle, M.D., Instructor in Obstetrics and Gynecology.

Howard S. McCandlish, M.D., Instructor in Obstetrics and Gynecology.

Lawrence W. Strong, M.D., Instructor in Gynecological Pathology.

Ogden F. Conkey, M.D., Instructor in Obstetrics and Gynecology.

William P. Driscoll, M.D., Instructor in Obstetrics and Gynecology.

Lynn L. Fulkerson, M.D., Instructor in Obstetrics and Gynecology.

Ira Wilens, M.D., Instructor in Obstetrics and Gynecology.

OBSTETRICS.

Instruction in obstetrics will be given during the second, third, and fourth years by recitations, lectures, manikin practice, ward section work, clinics and conferences, laboratory instruction, and attendance upon cases of confinement.

SECOND YEAR—Third Term—Recitations in sections will be held by the instructors on the physiology of pregnancy, the mechanism of labor and the care of the woman during the lying-in period. Definite assignments of study from a standard text-book are made.

Lectures will be given by Professor Bailey which are illustrated by lantern slides and the exhibition of specimens and methods, and deal with the problems of menstruation, ovulation, embryology and the physiology of early pregnancy and the puerperium. The principles of the hygiene of pregnancy and the conduct of normal labor are emphasized.

11 hours.

Lectures will be given by Professor Ward on obstetrical anatomy and the mechanism of labor in conjunction with the preliminary studies in gynecology.

6 hor

THIRD YEAR— First Term—Recitations in sections dealing with the pathology of obstetrics will be held by Dr. Williamson. Certain subjects are allotted for study and the student is closely quizzed on this work. This course is in the nature of a conference and discussion is encouraged.

Manikin practice is given to sections of the class and carried on in correlations with the quiz class. There is individual work by the students upon the phantoms under the close supervision and criticism of the instructors, Drs. Gravelle and McCandlish.

Second Term—Professor Bailey will give a series of illustrated lectures on the pathology and complications of pregnancy. 10 hours.

Second and Third Terms—Ward Section Work. The sections are divided into groups of eight or ten and they spend ten sessions of two hours each in the wards of Bellevue Hospital under the direction of Professor Bailey and the instructors. The sections are opened each day by the demonstration of whatever operative material there is at hand. It is then continued by bedside instruction in the management of the pregnant and parturient woman and the care of the new-born child.

20 hours.

Laboratory instruction is given in the Departments of Anatomy and Pathology upon the histology of the vulva, uterus, ligaments, Fallopian tubes, and ovaries in the pregnant and non-pregnant conditions and upon the histology and pathology of the decidua, chorion, placenta and umbilical cord. Material is demonstrated from cases of puerperal infections and toxemias of pregnancy.

FOURTH YEAR—First and Second Terms—Practical Instruction—Students attend cases in labor at the Berwind Maternity Clinic and make the requisite post-partum visits. The class in sections of five or more reside in the clinic building during a period of two weeks. Each student attends from twelve to twenty cases and when possible, follows his case from the prenatal visits to the tenth day of the puerperium. The student is instructed particularly in the prenatal care. The follow-up clinic carries the mother through a period of six weeks and the child for a period of one year. The student does his work under the close control of the entire staff of instructors. Conferences are held in the Clinic and free discussion of the cases under treatment is encouraged.

Approximately 98 hours.

Third Term—An elective course in advanced obstetrics is given under the direction of Professor Bailey. The student spends eight hours a day for one month, dividing the time between Bellevue Hospital and the Berwind Maternity Clinic; he observes the operative procedures and takes part in the prenatal examinations and in general ward administration.

GYNECOLOGY.

Instruction in Gynecology is given during the second, third and fourth years by (1) Recitations and lectures, (2) Section teaching in the Out-Patient Department, (3) General operative clinics, (4) Section work in operative clinics, (5) Ward demonstrations and conferences, (6) Laboratory courses, and (7) Full time elective courses.

- 1. During the second year recitations and lectures are given in the third term by Professor Ward. The student is systematically taught obstetrical and gynecological anatomy and the general principles of the subject so as to give him a foundation upon which to build his clinical knowledge. Charts, models, pathological specimens, instruments, lantern slides, etc., are used to illustrate the lectures.
- 2. Small sections of three or four students are drilled by the instructors in methods of examination and treatment of ambulatory cases in the Cornell Clinic during the third year. In connection with the Out-Patient teaching, instruction is given in gynecological cystoscopy, the technic of endoscopy, cystoscopy, catherizations of ureters and testing of kidney efficiency as applied to gynecological cases.

- 3. A general operative clinic by Professors Ward and Farrar is held at the Woman's Hospital for the fourth year students throughout the first and second terms. Charts, blackboard drawings, clay modeling, etc., are employed before the operation is begun, to teach the principles of operative gynecology: A stereomotograph is used during the operation to throw lantern slides upon the screen to show the operative steps and to refresh the student's memory of the anatomy of the region.
- 4. Small sections permit students at the operation to examine the patient under anæsthesia and thus enables them to study the detail of the operation, to write up reports, and to check up the diagnosis.
- 5. Ward demonstrations and conferences are held by the head of the department during the first and second terms of the fourth year at the Woman's Hospital. The students are brought into contact with the patients they have seen at operation and are thus enabled to follow the post-operative course of each case. They take histories of patients awaiting operation and make pelvic examinations under guidance.

Methods of diagnosis are demonstrated and the appropriate treatment is outlined Non-operative treatments are demonstrated during these conferences.

6. A course in pathological gynecology is given by the department of Pathology during the third year. Specimens from the museum and microscopical sections of diseased tissues are demonstrated.

Lectures on gynecological pathology and laboratory demonstrations of secretions, discharges and specimens obtained from patients who come under operation are given to sections of the fourth year class by Dr. Strong as a part of the course at the Woman's Hospital.

7. An elective course is given at the Woman's Hospital during the third term of the fourth year. The course provides for four students, working under supervision, as clinical clerks and assistants in the hospital from 9 A. M. to 5 P. M. daily for one month. It includes operating room work and the study of special research problems.

SYNOPSIS OF COURSES.

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Obstetrics Summar	RY.		
	Second Year.	Third Year.	Fourth Year.
Lectures	11 hours	10 hours	
Recitations		12 hours	
Sections		32 hours	
Practical Obstetrics			98 hours*
Gynecology Summar	RY.		
Cyneedog,	Second Year.	Third Year.	Fourth Year.
Lectures and Recitations	22 hours		
Sections		10 hours	
Clinics			(Elective)
Ward Demonstrations and Conferences			102 hours
* A narovimately			

Text-books.-Williams, Obstetrics; Crossen, Gynecology; Anspach, Gynecology; Polak, Gynecology; Ashton, Gynecology.

PEDIATRICS.

OSCAR M. SCHLOSS, M.D., Professor of Pediatrics.
LOUIS C. SCHROEDER, M.D., Assistant Professor of Pediatrics.
LYNN A. HOAG, M.D., Associate in Pediatrics.
JOSEPH C. ROPER, M.D., Instructor in Pediatrics.
JESSE F. SAMMIS, M.D., Instructor in Pediatrics.
CHARLES LANG, M.D., Instructor in Pediatrics.
MAY G. WILSON, M.D., Instructor in Pediatrics.
PHILIP M. STIMSON, M.D., Instructor in Pediatrics.
HERBERT F. JACKSON, M.D., Instructor in Pediatrics.
ARTHUR F. ANDERSON, M.D., Instructor in Pediatrics.
CHARLES WEYMULLER, M.D., Instructor in Clinical Pediatrics.
ROBERT O. DUBOIS, M.D., Assistant in Clinical Pediatrics.
SAMUEL Z. LEVENE, M.D., Assistant in Clinical Pediatrics.

The aim of this department will be to give thorough instruction in the fundamental principles of Pediatrics.

The student will be given opportunity to become familiar with the diseases peculiar to infants and children, and will receive special instruction in infant feeding and hygiene, and the therapeutics of children's diseases.

Third Year. There will be a clinical lecture once a week during the second and third terms. This will comprise a systematic consideration of the subject of Pediatrics, supplemented by the demonstration of illustrative cases. The students will be assigned in sections for recitations in which the field of pediatrics will be consecutively considered.

Sections of students will be assigned to the dispensary clinic. They will examine and suggest treatment for patients under direction of the instructor in charge.

A course of instruction in acute contagious diseases will be given at the Willard Parker Hospital. The student will have opportunity to become familiar with the diagnosis, care and treatment of such diseases.

Fourth Year. The work during the fourth year will be entirely practical. Sections will be assigned to the Children's wards of the New York Hospital and to the New York Nursery and Child's Hospital. Each student will be on duty from 2 to 5 P. M. three times a week for three weeks. This work will include a careful study of patients by the students, ward rounds and instruction by the head of the department or one of the instructors.

During the latter part of the fourth year, there will be an elective course. This will comprise work in the wards of the New York Nursery and Child's Hospital and the New York Hospital. Thirteen hours a week for four consecutive weeks will be given to this course.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY

Summary.		
	Third Year.	Fourth Year.
Clinics	42 hours	
Recitations	22 hours	
Sections	24 hours	
Clinical Clerkships		36 hours
Elective		60 hours

Text-books.—Holt, Diseases of Infancy and Childhood; Griffiths, Diseases of Children; Porter and Carter, Management of the Sick Infant.

Collateral Reading.—Still, Common Disorders and Diseases of Childhood; Hess, Principles and Practice of Infant Feeding; Morse and Talbot, Diseases of Nutrition and Infant Feeding.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY.

NEUROLOGY.

- CHARLES L. DANA, M.D., Professor of Clinical Medicine, Department of Neurology.
- R. FOSTER KENNEDY, M.D., Associate Professor of Clinical Medicine, Department of Neurology.
- JUNIUS W. STEPHENSON, M.D., Instructor in Clinical Medicine, Department of Neurology.
- Walter M. Kraus, M.D., Instructor in Clinical Medicine, Department of Neurology.
- THOMAS K. DAVIS, M.D., Instructor in Clinical Medicine, Department of Neurology.

Instruction in neurological anatomy, physiology and chemistry is given by the respective departments in the first and second years.

Instruction in Neurology begins in the last semester of the Second Year. During this period the students are given instruction in the methods of examining neurological cases and made to review the anatomy and physiology of the nervous system with special reference to neurological symptoms. In the Third Year the students are given weekly clinical lectures and conferences and the class, divided into sections, is given practical instruction in the examination of cases, history-taking and electro therapeutics, the work being done in the College Clinic. In the Fourth Year, the students are given clinical instruction in sections in the Neurological wards of Bellevue Hospital, and this work is kept up until the 1st of April. In the last two months of the Fourth Year optional courses in Neurology are given.

SUMMARY.

Second	Year. Third Year	. Four Year.
Lectures 5 hou	ırs	
Clinics 6 hou	irs 32 hours	
Sections	3 hours	36 hours

Text-book .- Dana, Diseases of the Nervous System.

Collateral Reading.—Works on nervous diseases by Sachs, Starr, Church and Peterson, Jelliffe and White, Oppenheim, Bing, and Stewart.

PSYCHIATRY.

- George H. Kirby, M.D., Professor of Clinical Medicine, Department of Psychiatry.
- SANGER BROWN, 2d, M.D., Instructor in Clinical Medicine, Department of Psychiatry.
- HENRY A. BUNKER, JR., M.D., Instructor in Clinical Medicine, Department of Psychiatry.
- BERTRAM D. LEWIN, M.D., Instructor in Clinical Medicine, Department of Psychiatry.

Instruction in psychiatry is given in the third and fourth years.

- I. Eleven lectures on medical psychology which will serve as an introductory course to the study of clinical psychiatry. The student will become acquainted with the principles of abnormal mental action as it occurs in the neuroses and the psychoses.
- II. Eleven lectures and eleven clinical demonstrations covering the main facts of modern psycho-pathology including the examination, observation, diagnosis and treatment of mental disorders. Special emphasis will be placed on the earliest manifestations of mental diseases and their management while under the care of the general practitioner. An effort will be made to give the student a comprehensive view of the whole field of psychiatry and to point out the importance of mental factors in all diseases and in the various social problems of the present day. The clinical demonstrations and practical exercises will be given on Ward's Island, which is reached by ferry from the foot of East 116th Street. The facilities of the Psychiatric Institute and the clinical material of the Manhattan State Hospital are available for teaching purposes.
- III. A fourth year elective course will be offered to a limited number of students. This will afford an opportunity for examination and study of patients in the wards of the Manhattan State Hospital. An opportunity will be offered these students to become familiar with the various psychometric tests useful in establishing a diagnosis of mental deficiency and to apply the principles of psycho-analysis in the study of the psychoses.

SHMMARY.

	Third Year.	Fourth Year.
Lectures on Medical Psychology	10 hours	
Lectures on Psychiatry	11 hours	
Clinics and Practical Exercises	33 hours	
Advanced Psychiatry		Elective

UROLOGY.

EDWARD L. KEYES, M.D., Professor of Clinical Surgery, Department of Urology.

Benjamin S. Barringer, M.D., Instructor in Clinical Surgery, Department of Urology.

HOWARD S. JECK, M.D., Instructor in Clinical Surgery, Department of Urology.

JULIUS J. VALENTINE, M.D., Instructor in Clinical Surgery Department of Urology.

Max S. Rohde, M.D., Instructor in Clinical Surgery, Department of Urology.

WILLIAM A. WILSON, M.D., Instructor in Clinical Surgery, Department of Urology.

The courses in this department are required of students during the third and fourth year. They are designed to give instruction in diagnosis and treatment of the surgical diseases of the urinary and male genital organs.

Clinic.—Third Year. A two-hour clinic will be given in Bellevue Hospital during the second term by Professor Keyes. At this clinic typical cases are demonstrated and discussed by the students themselves. Cases are followed during their stay in the Hospital and by means of a return clinic throughout their convalescence.

Lectures.—Third Year. A course of ten lectures will be given to the third-year class during the first term of the college session.

Section Teaching.—Third Year. The third-year class will be divided into sections of small size for instruction in the College Dispensary during the first and second terms.

Hospital Work.—Students who elect the course in the fourth year are assigned to clerkships in the wards of Bellevue Hospital and study the cases in the wards devoted to Urology continuously for one week. They are expected to follow these cases to a conclusion just as is done in the wards devoted to gene al surgery. Thus, during a service as surgical clerks, opportunity is afforded for the complete study of a considerable number of cases in the urological wards.

SUMMARY.

	Third Year.	Fourth Year.
Clinics	20 hours	
Sections	10 hours	
Lectures	11 hours	
Clinical Clerkships		Elective

Text-book .- Keyes.

Collateral Reading .- Cabot, Thompson-Walker.

DERMATOLOGY.

- HANS J. SCHWARTZ, M.D., Professor of Clinical Medicine, Department of Dermatology.
- OSCAR L. LEVIN, M.D., Instructor in Clinical Medicine, Department of Dermatology.
- Andrew J. Gilmour, M.D., Instructor in Clinical Medicine, Department of Dermatology.

Instruction in Dermatology and Syphilology will be given by Doctor Schwartz and his assistants. No teaching will be given didactically, but the cutaneous diseases will be demonstrated on the living subject. Abundance of material for such instruction is obtainable, and the student can thoroughly familiarize himself with the more common as well as with the rarer diseases of the skin by actual personal touch and observation. Attention is particularly paid to the diagnosis and the etiology of skin diseases, but their therapeutics also receive due consideration. Instruction will also be given in the intravenous and other forms of treatment by salvarsan and neosalvarsan.

SUMMARY.

	Second Year.	Third Year.	Four Year
Sections		10 hours	Elective
Clinic	11 hours	10 hours	Elective

Text-books.—Stelwagon, Diseases of the Skin; Schamberg, Diseases of the Skin and Eruptive Fevers.

LARYNGOLOGY AND RHINOLOGY.

- HARMON SMITH, M.D., Professor of Clinical Surgery, Department of Laryngology and Rhinology.
- Walter C. Montgomery, M.D., Assistant Professor of Clinical Surgery, Department of Laryngology and Rhinology.
- THOMAS A. MULCAHY, M.D., Instructor in Clinical Surgery, Department of Laryngology and Rhinology.
- ARTHUR PALMER, M.D., Instructor in Clinical Surgery, Department of Laryngology and Rhinology.
- SAUL KNOPF, M.D., Instructor in Clinical Surgery, Department of Laryngology and Rhinology.

The professor of the department gives instruction to the third year students by didactic lectures and clinical exercises. In this work he is assisted by the instructor and his other assistants. The lectures are illustrated by plates, models and stereopticon projections.

A Practical Course for the removal of tonsils and adenoids is given each section at the Manhattan Eye, Ear and Throat Hospital.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY

Each student is also individually instructed in the ordinary methods of examination of the nose and throat and shown the recent measures employed in laryngoscopy and bronchoscopy.

SUMMARY.

	Third Year.	Fourth Year
Lectures	11 hours	
Sections	10 hours	Elective
Clinic		Elective
1 1 777 1 1 1 0 11 70 1 / .	7 97 1	

Text-books .- Wright and Smith, Diseases of the Nose and Throat.

Collateral Reading.—St. Clair Thomson, Diseases of the Nose and Throat; Knight, Diseases of the Nose and Throat.

OPHTHALMOLOGY.

- ROBERT G. REESE, M.D., Professor of Clinical Surgery, Department of Ophthalmology.
- Bernard Samuels, M.D., Assistant Professor of Clinical Surgery, Department of Ophthalmology.
- George W. Vandergrift, M.D., Instructor in Clinical Surgery, Department of Ophthalmology.
- CHARLES A. DRAKE, M.D., Instructor in Clinical Surgery, Department of Ophthalmology.
- AQUIN S. KELLY, M.D., Instructor in Clinical Surgery, Department of Ophthalmology.

Instruction in Ophthalmology is given throughout the third year. The class is divided into small sections for work in the College Dispensary. Each student receives individual instruction in the use of the ophthalmoscope. External diseases of the eye and anomalies of the ocular muscles are covered in a practical way. Some time is devoted to errors of refraction and the fitting of glasses.

During the latter part of the year the professor of the department gives clinical lectures to the entire class, the patients coming from the College Dispensary and the New York Eye and Ear Infirmary. These lectures are illustrated with stert-option pictures.

Students may take Ophthalmology as an elective course, in the fourth year. An opportunity to witness operations, on the living, by the professor and the instructors, is provided at the New York Eye and Ear Infirmary. The histopathology of the eye is taught by microscopical sections prepared for the purpose.

SUMMARY.

	Third Year.	Fourth Year.
Sections	20 hours	
Clinic	11 hours	Elective

Text-book.—De Schweinitz.

Collateral Reading.—Fuchs, May.

OTOLOGY.

- FREDERICK WHITING, M.D., Professor of Clinical Surgery, Department of Otology.
- GEORGE B. McAuliffe, M.D., Assistant Professor of Clinical Surgery, Department of Otology.
- STEWART L. CRAIG, M.D., Assistant in Clinical Surgery, Department of Otology.

For clinical instruction in Otology the third-year class is divided into sections. Each student receives practical instruction in the College Dispensary from Professor Whiting and his assistants in the examination of patients, the use of the otoscope, and the various methods of testing the hearing. The student is permitted to examine patients and after a probationary period, to prescribe for them and thus gradually assume the duties of a clinical assistant. The students also have an opportunity of witnessing the more important operations in aural surgery, including intracranial complications, at the New York Eye and Ear Infirmary.

	Third Year.
Lectures	 8 hours
Sections	 10 hours

Text-book .- Bacon, On the Ear.

Collateral Reading.—Politzer, Diseases of the Ear; Macewen, Pyogenic Infective Diseases of the Brain and Spinal Cord; Whiting, The Modern Mastoid Operation.

ORTHOPEDIC SURGERY.

- CHARLTON WALLACE, M.D., Professor of Clinical Surgery, Department of Orthopedic Surgery.
- ARTHUR H. CILLEY, M.D., Assistant Professor of Clinical Surgery, Department of Orthopedic Surgery.
- IRVIN BALENZWEIG, M.D., Instructor in Clinical Surgery, Department of Orthopedic Surgery.
- WILLIAM V. HEALEY, M.D., Instructor in Clinical Surgery, Department of Orthopedic Surgery.

Instruction in this department is carried on in the third and fourth years:

I. In the first term of the third year:

- (a) Didactic and clinical lectures are given for one hour a week to the entire class in the college lecture room. Professors Wallace and Cilley.
- (b) The students work in sections in the College Dispensary for ten hours in the examination and treatment of patients. Prof. Cilley.
 - II. In the fourth year:
- (a) Each section of the class receives bedside instruction in congenital and acquired deformities in the wards of the Hospital for the Ruptured and Crippled, two mornings each week for four weeks.
- (b) One morning a week for four weeks each section receives instruction in industrial surgical conditions, at the Reconstruction Hospital. Dr. Healey.

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY

(c) Students are taught methods of examination and are required to examine the patient, giving a concise resumé of the history, diagnosis and treatment to be employed in each case. Informal recitations and discussions are held for one hour following the case work.

SUMMARY.

Third Y	ear. Fourth Year.
Lectures 11 hou	1rs
Sections 10 hou	ırs
Ward Work	36 hours

Text-books .- Whitman and Soutter's Operative Orthopedics.

ROENTGENOLOGY.

HARRY M. IMBODEN, M.D., Professor of Roentgenology.
RALPH EUGENE HERENDEEN, M.D., Instructor in Roentgenology.

The course in this department consists of the demonstration of the apparatus and the method of making Roentgen examination of various portions of the body. The time is largely spent in considering the scope and accuracy of this method of diagnosis in all branches of medicine. This will include the study and intrepretation of Roentgenograms showing foreign bodies, fractures, dislocations, and bone and joint lesions, renal, ureteral, and verical calculi and other lesions which can be detected Roentgenographically, including pyelography. Lesions of the skull, the study of the teeth, infections of the accessory sinuses, together with the Roentgeno-diagnosis of joint lesions produced by these infections will be considered. Respiratory lesions—abscesses, tumors of the lungs, mediastinal tumors—are carefully considered, special attention being devoted to the early diagnosis of pulmonary tuberculosis.

Lesions of the gastro-intestinal tract such as strictures and diverticula of the esophagus, and growths. Particular emphasis will be given to the motor phenomena of the stomach; to the diagnosis of gastro-duodenal lesions such as carcinoma, ulcers of the stomach and duodenum; and to gall-bladder infection, with or without calculi.

As far as possible this work will be carried on in conjunction with the other clinical departments, all students having the opportunity of studying individual cases clinically before the Roentgenographic study, then comparing the clinical findings, the Roentgen findings, and if possible the surgical findings in such cases as require surgical procedure.

After having had demonstrated to them a series of plates on allied subjects the students are in turn required to re-interpret these Roentgenograms to the class. This method has proved exceedingly valuable and will be followed to a great extent.

Finally, the course will conclude with lectures on Roentgeno-therapy covering the treatment of both superficial and deep-seated lesions, describing the cross-fire method, the advantage of high penetration with the Coolidge tube, and methods of dosage in the application of rays with or without filters.

SUMMARY.

 Third Year. Fourth Year.

 Lectures
 22 hours
 Elective

HYGIENE.

John C. Torrey, Ph.D., Professor of Hygiene. John W. Churchman, M.D., Associate in Hygiene. LINSLEY R. WILLIAMS, M.D., Lecturer on Hygiene. Morton C. Kahn, A.M., Instructor in Hygiene.

Instruction in some of the many branches of hygiene and preventive medicine is given in connection with certain of the courses pursued in the several departments of Bacteriology, Chemistry, Physiology, Pathology and Medicine.

The more distinctive features of this subject, however, are presented in a course of lectures and demonstrations during the third term of the second year. A certain amount of laboratory work is also required of each student. In addition time has been alloted for field work through which the student may acquire experience in making sanitary surveys and visit localities in the vicinity where the practical application of sanitary devices and hygienic methods may be observed.

SUMMARY.

	Second Year.
Lectures and Conferences	40 hours
Laboratory Work	37 hours
Field Work	22 hours*

^{*}Eleven afternoons are assigned for field experience.

Text-book.-Rosenau, Preventive Medicine and Hygiene; Park, Public Health and Hygiene.

Collateral Reading.—MacNutt, Manual for Health Officers; Wood, Sanitation Practically Applied; Chandler, Animal Parasites and Human Disease.

MEDICAL JURISPRUDENCE.

OTTO H. SCHULTZE, M.D., Professor of Medical Jurisprudence.

A course of lectures from the standpoint of the medico-legal autopsy, with demonstration of material, will be given by Professor Schultze. This course will cover autopsy technique in medico-legal cases, the autopsy protocol, and laboratory methods for establishing the proof of the cause of death in cases of accident, suicide, and homicide; also, the forensic aspect of the subject in cases of indemnity, liability and criminal prosecution.

The clinical aspects of the subject are covered in the regular course of study by several departments and by special lectures. The responsibilities of the physician towards the insane and their relatives and the general public, and the medico-legal aspects of mental deficiency are discussed by Professor Kirby. In the course on Obstetrics, Professor Bailey takes up the moral and legal side of rape, feigned and unconscious pregnancy, what

SPECIAL DEPARTMENTS OF MEDICINE AND SURGERY

constitutes a "live birth," feigned or unconscious delivery, injury to the fettus during precipitate labor, post-mortem delivery and the diagnosis of recent delivery. The medico-legal aspects of Toxicology are fully covered during the course in Pharmacology by Professor Hatcher.

MILITARY SCIENCE AND TACTICS.

JOHN M. HEWITT, Major, M.C., U.S.A., A.M., M.D., Professor of Military Science and Tactics.

This course is concurrent with the medical course, extending over a period of four years (two basic and two advanced), and is designed to prepare students for commissions in the medical section of the Officers' Reserve Corps upon graduation in medicine. Instruction embraces lectures and recitations, with graphic and stereopticon demonstrations at college one hour each week.

Summer Camps. One compulsory summer camp during the course is held at the Medical Field Service School, Carlisle, Pa., where actual field conditions are simulated. The whole is calculated to touch every important phase of medico-military science.

At camp the student takes an actual part in the mimic enactment of the various rôles played by the medical service in campaign, of which the two chief functions are the salvage of the wounded and the prevention of disease.

Sanitation, sanitary devices and epidemiological methods in peace and war time are demonstrated. A generous portion of time is given to athletics, field and gymnasium. There is some drill, some mapping and sketching, with such social entertainment as a college town of 10,000 may provide.

SYNOPSIS OF COURSE.

Ist Year. The principles and policies of Government. The Military Forces. Medico-military science. Organization of the Army. Organization of the Medical Department. The School of the Soldier and School of the Company—including Personal Hygiene, First Aid, Customs of the Service, Articles of War and Court Martial, Administration, Food, Clothing, Equipment, Shelter.

2nd Year. Sanitary Tactics. Detailed tactical employment of the Sanitary Soldier in War. Hygiene and Sanitation of Troops and battle areas. The Medical Detachment in War. The Medical Regiment. First Aid, Shock, Hemorrhage, Gas, Evacuation and Transportation methods for wounded. Study of campaigns.

3rd Year. The essentials of Military Hygiene and Sanitation. The Recruit, selection, methods of examination, equipment, care. Water purification (in peace and war); Disposal of Wastes (in peace and war); Hygiene of Moving Troops; the Train, the Ship, the March.

Disease Detection; Isolation; Prevention Methods; Communicable Diseases (in peace and war). Sanitary Police; Sanitary surveys: Technic of Sanitary

Inspections. Camp Sanitation; Sanitary Devices; Pits, sullage, latrine, urinal, ablution. The Kitchen: traps, incinerators.

4th Year. Hospitals and Hospitalization. Development of hospitals; Construction; Equipment; Procurement; Government; Service and Practice; Interior Economy; Rules and Regulations.

Records and Reports. Inspections-general and special.

Offices of—The Commanding Officer Chiefs of Technical Surgical
The Executive Officer Services Laboratory
Registrar Special
Receiving Officer Wards, Clinics,
Dispensaries
Special War Wounds War Surgery

The course may be shortened by allowing credits for competent courses of military training completed elsewhere.

In the advanced Course the Government gives the student the money value of a ration which has usually amounted to about \$12.50 per month. There is an allowance of 70 cents per diem at the Summer Camp, with a ration, and the transportation from College or home to Camp and return, or 5 cents a mile, in lieu of Government transportation.

FOURTH YEAR ELECTIVES

FOURTH YEAR ELECTIVES. SESSION OF 1923-1924.

March 31st to May 26th, 1924.

Students will register their courses at the Secretary's office on or before March 1st.

A. ANATOMY.

- I. General Histology. Dr. Chambers. 2 months. Mondays, Wednesdays, Fridays, 9-12. 3-6 students.
- II. Phases of Histogenesis. Dr. Chambers. 2 months. Tuesdays and Thursdays, 10-12. 3-6 students.
- III. Anatomy of the Infant. Dr. Stockard. 2 months. Mondays, Wednesdays, Thursdays, Fridays, 2-5 P.M. 1-4 students.
- IV. Experimental Embryology. Dr. Stockard. 2 months. Tuesdays, 2-3 P.M. Not less than 6 students.
- V. Regional Anatomy. Dr. Morrill. 2 months. Mondays and Wednesdays, 9-12. 3-6 students.
- VI. Neuro-Anatomy. See Neurology.

Py. PHYSIOLOGY.

- I. Calorimeter Investigation. Dr. Lusk. April only. 4 weeks. 9 A.M.-1 P.M. daily. 2 students.
- II. Electrocardiography. Dr. Edwards. 12 weeks. 1-5 P.M. daily. 1-4 students.

C. CHEMISTRY.

I. Chemical Pathology. Selected work in Blood Analysis. Dr. Benedict. 1 month periods. Tuesdays and Thursdays, 10-1. (Hours assigned are subject to adjustment at students' request). 2-10 students.

Pr. PHARMACOLOGY.

I. Pharmacology of Cardiac Drugs. Drs. Hatcher and Gold. 2-week periods. Monday, Wednesday, Friday, 2-5 P.M. 4-12 students.

M. MEDICINE.

- I. Clinical Clerks. Drs. Conner, Foster and Stillman. New York Hospital. 1 month periods. Daily, all day. 5 students.
- II. Physical Diagnosis of Diseases of the Chest. Dr. Ryder. Bellevue Hospital. April or May. Tuesday and Thursday, 2-5 P.M. Students are expected to spend at least two mornings per week preparing cases. Open to fourth year students and graduates. 5 students.
- III. Advanced Course in Metabolism Methods. Given in conjunction with the Department of Chemistry. Drs. DuBois, Benedict, Behre, Barr, Richardson and Blau. Bellevue Hospital and Cornell Medical College. The course may be divided into one month periods (two months' attendance is preferable). Three Undergraduates and three Graduates.

- During the first month students will study methods of respiratory physiology and chemistry in the chemical laboratory. Instructions will include the use of the Henderson & Haldane gas analysis apparatus, methods of determining oxygen and COcontents of blood and plasma by means of Van Slyke pipette, and nitrogen and sugar determination in blood and urine. Dr. Benedict will teach the significance and technique of chemical examination of blood and urine.
- During the second month students will study cases in the Metabolism Ward, learn management of diets, technique of the Tissot apparatus and respiratory calorimeter, and the clinical application of the various methods and tests.
- Ambulatory Medicine. Dr. Bradbury and Assistants. College Clinic.
 One month period. Every day except Saturday, 1:30-4 P.M. four students.
 - 2. One month period. Tuesday and Friday, 5-7:30 P.M. four students.
 - V. Fluoroscopy of the Gastro-Intestinal Tract. Dr. Holland. New York Hospital. 1 month periods. Tuesday and Friday, 4-6 P.M. 6 students.
- VI. Electro-Cardiography and Polygraphy. Interpretation of the electro-cardiogram and the use of the polygraph and the interpretation of its records. Dr. Pardee. New York Hospital.

 1 month periods. Monday and Friday, 3-5 P.M. 5 students.
- VII. Diagnosis and Treatment of Heart Failure. Dr. Eggleston. Bellevue
 Hospital. 1 month periods. Monday and Wednesday. 2 to 5 P.M.
 6 students. Students are expected to devote at least 2 mornings
 per week to the preparation of cases and the study of literature.

CP. CLINICAL PATHOLOGY.

- I. Clinical Bacteriology and Vaccine Therapy. Daily, 9-1, April and May. Number of hours, optional. Must take at least 25 actual hours. Dr. Thro. 10 students.
- II. Complement Fixation. Every Wednesday afternoon, 2:30 to 5:30. April and May. 1 to 5 students. Dr. Thro.
- III. Advanced Clinical Pathology of Urine and Blood. Daily, 9-1.
 April and May. Number of hours, optional. Must take at least 50 hours. Drs. Thro and Richards. 10 students.

S. SURGERY.

- I. Clinical Clerks. Dr. Hartwell. Bellevue Hospital. 1 month periods. All day. 4 selected students.
- II. Surgical Pathology. Bellevue Hospital. Laboratory and wards. 1 month periods. All day. 2 students.
- III. Clinical Clerks. Dr. Gibson. New York Hospital. 1 month periods.
 All day. 4 students.
- IV. Dispensary Course. New York Hospital. Drs. Farr, Weeden and Murray. (Clinical course in fractures of upper extremity, minor

FOURTH YEAR ELECTIVES

surgery, "accident" surgery, and care and treatment of postoperative wounds). Length of course 4 weeks. Time:—Tuesday, Thursday and Saturday, 9 to 12. 8 students.

- V. Surgical Diseases in Children. St. Mary's Hospital. Dr. Farr. Mondays, 9 to 12. One month periods. 4 students.
- VI. Surgical Diseases of the Breast. Dr. Lee. Monday, Wednesday, Thursday 9 to 12, Saturday 8:30 to 11:30 A.M., at the Memorial Hospital; Tuesday and Friday, 9 to 12, at the New York Hospital. Diagnosis and treatment of the Diseases of the Breast. 1 month period. 1 student.

Ob. OBSTETRICS.

I. Clinical Clerkship in Obstetrics. Drs. Bailey and Williamson. Bellevue Hospital. 1 month periods. Full time. 9 A.M.-5 P.M. 16 students.

Pt. PATHOLOGY.

- I. Tumor Diagnosis. Dr. Ewing. 2 months, 5 days; 1-5 P.M. daily, except Saturdays. 5 students.
- II. Pathological Thesis. Dr. Ewing. 2 months. All day, except Saturday. Saturdays, 9 A.M.-12 M. 5 students.
- III. Gynecological Pathology. Dr. L'Esperance. 1 month. Monday, Wednesday, Friday, 3 to 5 P.M.
- IV. Neuropathology. Dr. Stevenson. 2 months. Daily except Saturday 1 to 5 P.M. 2 students.

B. BACTERIOLOGY.

- I. Experimental Laboratory Course in General and Applied Immunology. By Dr. A. F. Coca, at the New York Hospital.
 - (1) Experimental analysis of natural immunity to diphtheria.
 - (A) Schick test (in human beings).
 - (B) Cellular immunity (in the rat).
 - (1a) Active immunization to diphtheria (in human beings).
 - (2) Pirquet test.
 - (3) Method of testing antitoxic sera.
 - (4) Grouping of human individuals with respect to isohemagglutinins.
 - (5) Practical test of the blood, as performed previous to the operation of blood transfusion.
 - (6) The characteristics of immunity reactions.
 - Practical study of bacterial agglutinins, precipitins, hemolysins and complement.
 - (8) Forensic test for human blood.
 - (9) Specific complement fixation (Bordet-Gengou).
 - (10) Wassermann reaction.
 - (11) Anaphylaxis.
 - (12) Atopic sensitiveness.

Note—Each exercise is accompanied with a full discussion of all of the principles and theories concerned in the experiments,

The course is given from 9 to 12 A.M. during a period of four weeks, in April, as follows: Monday, Wednesday and Friday of the first week, and Monday to Friday, inclusive, in each of the other three weeks.

In the interest of the students the course is given to small classes (not exceeding 16 members) and in the event that 24 or more students apply the course will be repeated in May during corresponding time periods.

Since definite assignments cannot be made until the number of applicants is known students desiring to take this course are requested to apply to the Secretary's Office not later than February first. This will enable the department to consider preferences and make assignments which will not interfere with other electives the student may desire to take.

II. Clinical Course in Human Hypersensitiveness.

(Asthma, hay-fever, urticaria, angio-neurotic edema, food and drug idiosyncrasies) by Dr. Robert A. Cooke at the New York Hospital.

- (1) Technique of the cutaneous teste
- (2) Interpretation of the local reaction.
- (3) History taking in allergic cases.
- (4) Diagnosis and Treatment.

Note—This course is given twice weekly in the evening, only in conjunction with the Experimental Laboratory Course in General and Applied Immunology.

N. NEUROLOGY.

COURSES IN NEURO-PSYCHIATRY AND NEURO-ANATOMY. ONE-MONTH PERIODS.

- I. Neurology: clinics at Cornell Dispensary from 2 to 4 P.M. Also one and two hour periods, 3 (or 4) P.M. to 5 P.M. every afternoon in the Neurological Wards of Bellevue Hospital.
- II. Neurology: Bellevue Hospital, three days weekly, 11 A.M. to 12 M.
- III. Psychiatry, 10 A.M. to 12 M., Cornell Dispensary; Ward Work in Psychiatry, three forenoons, at Ward's Island; Dr. Kirby.
- IV. Neurological Clinic. Neurological Institute. One day, 2-5 P.M. Dr. Stevenson.
 - V. Neuro-Anatomy. Three days. 9 to 11 A.M. Dr. Stockard. This will be held for one week out of the four. Students will be provided with a specimen brain for dissection.
 - Students who desire more Neurology and less Psychiatry, can make arrangements with the teachers, and the same may be done for those who desire to emphasize Psychiatry.
 - A Student can take such parts of this course as he chooses, except that it is imperative that he takes at least the daily afternoon course at the College Clinic.

Ps. PSYCHIATRY.

I. Clinical psychiatry, with special reference to incipient and border line cases in relation to general practice. Dr. Brown and assistants. For groups of 6 students at the College Dispensary 3 forenoons a week, Monday, Wednesday and Thursday, for 1 month.

FOURTH YEAR ELECTIVES

II. Clinical psychiatry, examination of hospital cases with opportunity to study different types of psychoses. Drs. Kirby and Bunker. For 6 students, at the Psychiatric Institute. Ward's Island, 3 forenoons a week, Tuesday, Thursday and Friday, for 1 month.

Pd. PEDIATRICS.

- I. Clinical Pediatrics. Drs. Schloss, Schroeder, Sammis and Lang. New York Nursery and Child's Hospital daily 9 A.M. to 5 P.M. for periods of 1 month. Limited to 3 or 4 students.
- II. Clinical Pediatrics. Dr. Roper. New York Hospital daily, 2-5 P.M. for period of 1 month. Limited to 2 students.
- III. Clinical Pediatrics. Dr. Stimson.
 - Part 1. (a). Cornell Clinic, Wednesdays 9:30-11:00 and Fridays 9:30-12:30. (Thursdays 1:30-4:00 may be added if desired.) Malnutrition in older children. Unusual conditions for diagnosis and treatment.
 - Part 1. (b). Willard Parker Hospital, Mondays 10-1:00 and
 Wednesdays 11:00-1:00. The students will assist
 in the work of the third year clinics.
 - Part 2. New York Nursery and Child's Hospital Out Patient Department Tuesdays, Thursdays, and Saturdays, from 10:00-12:30. Feeding cases.

Part 1 and 2 may be taken separately, but preference will be given to students electing both parts. 1 or 2 students, for periods of one month.

G. GYNECOLOGY.

I. Clinical Gynecology. Dr. Ward. Woman's Hospital. 1 month periods. Daily, as scheduled below. Work conducted in Wards, Operating Room, Laboratory and O. P. D. 4 selected students.

A. FIRST TWO WEEKS.

M	0	n	d	2	**	

9-12. Operative Clinic. 2-4. Operative Clinic.

12- 1. Study. 4-5. Pathological Lab.

Tuesday.

9-11. Pathological Lab.

2-5. Operative Clinic.

9-11. Pathological Lab. 2-5. Operative Clinic 11-12:20. Cystos. Clinic.

Wednesday.

9-10. O. P. D. 2-4. O. P. D.

10-11. Follow-up. 4-5. Pathological Lab.

11- 1. Study.

Thursday.

9-11. Pathological Lab.
2-4. Operative Clinic.
1-12:30 Cystos Clinic 4-5. Pathological Lab.

11-12:30. Cystos. Clinic. 4-5. Pathological Lab.
5 Conference, Surgical Staff.

B. SECOND TWO WEEKS.

Friday.

9-11. Operative Clinic.

11-12. Conference.

12- 1. Study.

Saturday.

9-11. O. P. D.

11- 1. Study.

2-3. O. P. D.

2-5. Operative Clinic.

2-4. Operative Clinic.4-5. Pathological Lab.

2-5. Operative Clinic.

4-5. Pathological Lab.

2-4. Operative Clinic.

4-5. Pathological Lab.5 Conference, Surgical Staff.

2-5. Operative Clinic.

2-4. O. P. D.

Monday.

9-1. Wards.

Wards.

Tuesday. 9-1. Wards.

9-1. Wards.

Wednesday. 9-1. Wards.

Thursday.

9-1. Wards.

Friday. 9-10. Wards. 10-11. Conference.

11- 1. Study.

Saturday.

9-1. Wards.

2-3. O. P. D.

II. Clinical Gynecology. Dr. McGrath, Cornell Clinic. 1 month periods. Daily, 1-4 P.M. 3 students.

D. DERMATOLOGY.

I. Clinical Dermatology and Salvarsan Administration. Drs.
Schwartz, Levin and Gilmour. 1 month periods. Daily, 1-4 P.M.
6 students.

L. LARYNGOLOGY.

I. Clinical Courses in Laryngology and Rhinology. Drs. Montgomery and Howard. 1 month periods. Mondays, Tuesdays and Fridays. 1-4 P.M. College Dispensary. 2 students.

Op. OPHTHALMOLOGY.

- I. Operative Opthalmology. Dr. Reese. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays, 2-6 P.M. 20 students.
- II. Ophthalmoscopy and Refraction. Dr. Drake. N. Y. Eye and Ear Infirmary. Wednesdays and Fridays, 2-4 P.M. 1 month periods. 6 students.

FOURTH YEAR ELECTIVES

- III. Ophthalmoscopy and Refraction. Dr. Samuels. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays and Wednesdays. 2-4 P.M. 6 students.
- IV. Ophthalmoscopy and Refraction. Dr. Vandegrift. Cornell Dispensary. 1 month periods. Mondays, Wednesdays, and Fridays. 2-4 P.M. 6 students.
 - V. Operative Ophthalmology. Dr. Samuels. N. Y. Eye and Ear Infirmary. 1 month periods. Fridays, 2-4 P.M. 20 students.
- VI. Opthalmoscopy and Refraction. Dr. Drake. Cornell Dispensary. 1 month periods. Tuesday, Thursday and Saturday. 2-4 P.M.
- VII. Ophthalmoscopy. Dr. Kelly. N. Y. Eye and Ear Infirmary. 6 weeks periods. Wednesday and Friday, 2-4 P.M. 10 students.
- VIII. Operative Ophthalmology. Dr. Kelly. N. Y. Eye and Ear Infirmary.

 1 month periods. Mondays, 2-6 P.M. 20 students.
- IX. Clinical Ophthalmology. Dr. Samuels, Cornell Clinic. Tuesdays and Thursdays, 1-4 P.M. 6 students.

Ot. OTOLOGY.

- I. Otology. Dr. Whiting. N. Y. Eye and Ear Infirmary. 1 month periods. Mondays, Wednesdays and Fridays, 2-3 P.M. 5 students.
- II. Otology. Dr. McAuliffe. College Clinic. 1 month periods. Tuesdays and Fridays, 1-4 P.M. 3 students.

Or. ORTHOPEDICS.

- I. The Orthopedic Department of the Hospital for Ruptured and Crippled on Tuesdays, Thursdays and Saturdays, from 1-3, by Doctors Wallace and Balenzweig. 10-12 students.
- II. The College Clinic. Mondays, Wednesdays and Fridays, 1-4 P.M.
 2 students for 1 month periods. Dr. Cilley.

H. HYGIENE.

I. Laboratory Methods and Procedures. Dr. Torrey. Loomis Laboratory. Daily, 1 to 5 P.M., for 2 months. 2 students.

U. UROLOGY.

- I. Minor Urology. Dr. Wilson, College Clinic. 1 month periods. Daily, 1-4 P.M. 8 students.
- II. Major Urology. Drs. Keyes and Jeck. Bellevue Hospital, Ward K4, 8.30 A.M. to 5 P.M., daily. Diagnosis and Treatment of Surgical Urological conditions. 1 month. 6 students.
- Minor Urology and Elementary Cystoscopy. Dr. Wilson, as in Course
 I. 2 months, April and May. Daily, 2 to 4 P.M. 4 students.
- IV. Diagnosis and Treatment of Neoplasms of the Urinary and Male Genital Tracts. Dr. Barringer. Memorial Hospital. Subject to special arrangement with instructor.

NOTE-In addition to the above, students will often be able to arrange individual work on application to the heads of Departments.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice.

SCHEDULE OF COURSES

FIRST YEAR-SESSION OF 1923-1924-FIRST TERM

September 25th to December 22d.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9						
10			ANAT	OMY		
11						u.i
1	(Histology	Chem. L.	(Histology	Chem. L.	(Histology	1
2	and	Anatomy	and Embryology)		and Embryology)	
3	Embryology)		Linbi yology)	Chem. Lab.	Military	
4					Science L.	
5						

FIRST YEAR-SESSION OF 1923-1924-SECOND TERM

January 7th to March 15th.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
9 10	(Histolo	Anatomy ogy and Emb	oryology)	Anatomy	Anatomy (Histology and Embryology)		
1 2 3 4	Anatomy	Chem. Lab.	Anatomy Military Science L.	Chem. L.	Anatomy		

FIRST YEAR-SESSION 1923-1924-THIRD TERM

March 17th to May 31st.

						uy Olot.
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Chem. L.	Physiol. L.	Chem. L.	Physiol. L.	Physiol. L.	Physiol. L.
11 12	Chem. Lab.	Physiol. Lab.	Chem. Lab.	Physiol. Lab.	Chem. R.	Physiol. Lab.
3	Anatomy (Neuro-Anat.)	Military Science L.	Anatomy (Neuro-Anat.)	Physiol. R.	Anatomy (Neuro-Anat.)	

Abbreviations.—L., lectures; Lab., laboratory; Rec., recitations; Sec., section (the class being arranged to two or more divisions for certain exercises); B. H., Bellevue Hospital (Second Division); B. H. 4, Bellevue Hospital (Fourth Division); B. M. C., Berwind Maternity Clinic; C. D. College Dispensary; Man, Mat, Manhattan Maternity Hospital; N. C., New York Nursery and Child's Hospital; N. Y., New York Hospital; O. P. D., Bellevue Hospital, Out Patient Department; R. & C., Hospital for the Ruptured and Crippled; R. H., Reconstruction Hospital; St. L., St. Luke's Hospital; St. M., St. Mary's Hospital; W. I., Ward's Island, Manhattan State Hospital; Wom. Hosp., Woman's Hospital.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice.

SECOND YEAR-SESSION OF 1923-1924-FIRST TERM

September 25th to December 22d.

Hour	Monday Tuesday		Wednesday	Thursday	Friday	Saturday				
9	P	HYSI	OLOG	GY LECTURE						
10	Physiol.* Anatomy		Physiol.* Lab.	Anatomy	Physiol.* Lab.	Anatomy				
2	Physiol. R.	Physiol. Elective	Physiol. R.	Physiol- ogy R.	Physiol. Seminary					
3	Elective†‡ Pharmacy		L (R.O.T.C.)	Pharmacology macy	Elec- tive† Pharm	У				
†Tl	*Ithaca students elect either Anatomy or Physiology until course in Nutrition begins. †The Student will elect Anatomy, Physiology or Chemistry. *ILectures on Physiology of Reproduction, 3 to 4 P.M. \$R.O.T.C. students only.									

Note.—Vertical divisions in daily columns indicate that such courses run a half term only, ourses change Nov. 5th, 9 A.M.

SECOND YEAR-SESSION OF 1923-1924-SECOND TERM January 7th to March 15th.

Hour	Monday	Tuesday	Tuesday Wednesday Thursday		Friday	Saturday			
9	Surg. L.	Med. R.		Sur. R.	D. d. d.	Surg. Clinic			
10			Pathology		Pathology				
11	Pathology	Pharmacology	Patholog.	Pharmacology	Medicine Clinic	Patholog.			
12			Anatomy		Clinic	Anatomy			
BACTERIOLOGY									
5	Pharmacology Military* L. Science L.								

*R. O. T. C. Students only.

SECOND YEAR-SESSION OF 1923-1924-THIRD TERM March 17th to May 31

				M	arch 17th to N	lay 31st.
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9	Surg. L.	Sections	Surg. L.	Sections	Patholog.	Sections
10						
11	Pathology	Hygiene	Pathology	Hygiene	Patholog. Anatomy	Hygiene
12					Milatolity	
1	1					
2	Dermatology Clinic C. D.	Immunology L.	Gynecology R.	Immunology L.		
3	Med. Clinic	Pharmacol. L.	armacol. L. Neurology Clinic		Hygiene	
4	В. Н.	Obstetrics	Med. R. Sec. A. & B.	Pharmacology L.	Field Excursion	
5	Obstetrics R. A. & B.	Clinic and Conference	Physical* Diagnosis L.	Hygiene L. Dr. Williams		

*First four weeks only.

For schedule of Sections see page 81.

NOTE—The Faculty expressly reserves the right to make alterations in the curriculum hencurer advisable and without notice. For abbreviations see page 74.

THIRD YEAR-SESSION OF 1923-1924-FIRST TERM September 25th to December 22d

					moth to Decel	
Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
9		Pathology		Patholog. Anatomy	Pathology	Med. L. Prof. Conner
11	Medicine Clinic C. D.		Clin	nical Pathol	ogy	
12	Prof. Conner	0.				
2		tions dule No. 2)	Urology L. Prof. Keyes	Laryncology Prof. Smith	Sections (See Schdeule No. 2)	Sections
3	Sections (See Schdeule	Surgery Clinic, B.H. Prof. Hartwell	Orthoped. L. Prof. Wallace	Sections (See Schedule	Neurology Clinic Prof. Dana	(See Schedule No. 3)
4	No. 3)	Ophthal- mology. L.	Mil. Science*	No. 3)	Sections	
5	Therap. L. Prof. Goodridge	See Sched	ctions lule No. 3)	Otology Prof. Whiting		

^{*} R. O. T. C. Students only.

THIRD YEAR-SESSION OF 1923-1924-SECOND TERM January 7th to March 15th

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
9	Sections	Surgery L. Prof. Gibson Medical Psychology L.	Sections	-	Sections	Urology Clinic, B. H Prof. Keyes	
11		S		I O N dule No. 4)	S		
2	Sect (See Sche	ions dule No. 2)	Therap. Rce.	Dermatology Clinic Prof. Schwartz	Sections (See Schedule No. 2)	Pediatrics Clinic, N. C.	
3	Applied Anatomy	Neurology Clinic, B.H. Prof. Dana Applied Anatomy		Surgery Clinic, B. H. Prof. Hartwell Obstetrics L. Prof. Bailey	Applied Anatomy	Dr. Schroeder	
5	Med. Jurisprud L. Prof. Schultze	Clinic Prof. Bailey	Med. L. Prof. Conner	Therap. L. Prof. Goodridge	Military* Science L.		

For schedule of Sections see pages 81 to 83. *R. O. T. C. Students only. NOTE—The Faculty expressly reserves the right to make alterations in the curriculum vehencer advisable and without notice. For abbreviations see page 74.

THIRD YEAR-SESSION OF 1923-1924-THIRD TERM

March 17th to May 31st.

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday					
9	Sections	Surg. L. Prof. Gibson			Sections	Med. Clinic					
10	Beetons	Psychiatry L.	Sections	Med. Clinic Prof. Conner C.D.	Sections	В. Н.					
11	SECTIONS										
12	(See Schedule No. 4)										
2	Roentgenology L. Prof. Imboden	Ophthal, Clinic or L. Prof. Reese			Roentgenology L. Prof. Imboden	Pediatrics Clinic					
3	Operative	Neurology Clinic Prof. Dana	Psychiatry	Operative		Dr. Schroeder					
4	Operative Surgery	Surg. L.	W. I.	Surgery	Surg. Clinic† Prof. Gibson N. Y.						
5	Med.Jurisprud. Prof. Schultze	Therap. Rec.		Therap. L. Prof. Goodridge							
†E	†Elective for fourth year students.										

For schedule of Sections see pages 81 to 83. NOTE—The Faculty expressly reserves the right to make alterations in the curriculum voluncever advisable and without notice. For abbreviations see page 74.

FOURTH YEAR-SESSION OF 1923-1924

October 1st, 1923 to March 29th, 1924.

Elective†	Tu. Th. S. 9 A.M1 P.M.	旦	Ĭž,	D	В	O.	V
Obstetrics B. M. C. and Gynecology Wom. Hosp.		В	٥	4	E	H	D
Orthopedics	R.H.—M. 9 A.M12 N.	田	Į.	D	В	C	V.
Neurology Pediatrics B. H.	N.Y.—W. 2-5 P.M.	N	Ē	D	В	C	A
Neurology B. H.	σż_:	ल	[7]	D	В	O	V
Surgery	В. Н.	υ.	V	В	[2	D	迅
Suri	N. Y.	<u>[7</u>	D	田	υ	4	B
cine	В. Н.	G.	E	í÷,	V	æ	υ
Medicine	N. Y.	A	В	C	D	ਬ	E
		October 1 to	October 29 to November 24	November 26 to December 22	January 7 to February 2	February 4 to March 1	March 3 to March 29

Students desiring electives will first consult the head of department and then recister at the Secretary's office four weeks in advance for Elective work on Tuesday, Thursday and Saturday A.M. NOTE-The Faculty expressly reserves the right to make alterations in the eurriculum whenever advisable and without notice. For abbreviations see page 74.

FOURTH YEAR SECTIONS in Gynecology and Obstetrics Session of 1923-1924

						Obstetrics Section, B. M. C. full time	Gynecology Section Wom. Hosp. 9 A.M.—5 P.M.
September	30th,	1923 t	October .	13th,	1923	B_2	B ₁
October	14th,	1923 t	October	27th,	1923	B_1	B ₂
October	28th,	1923 t	o November	10th,	1923	C ₂	C ₁
November	11th,	1923 t	o November	24th,	1923	Ci	C_2
November	25th,	1923 t	o December	8th,	1923	A_2	A ₁
December	9th,	1923 t	o December	22d,	1923	A ₁	Λ_2
December	23d,	1923 t	o January	5th,	1924		
January	6th,	1924 t	o January	19th,	1924	E ₁	E ₂
January	20th,	1924 t	o February	2d,	1924	E_2	E ₁
February	3d,	1924 t	o February	16th,	1924	F ₁	F ₂
February	17th,	1924 1	o March	1st,	1924	F ₂	F ₁
March	2d,	1924 1	o March	15th,	1924	D_1	D_2
March	16th,	1924	o April	5th,	1924	D_2	D ₁

Saturday		1						
Friday			College		from heads	psies) as		
Thursday	-	IVES	Students will register their courses at the College office on or before March 1st	s on pages 67 to 73.	(No course can be dropped without written permission from heads of all departments concerned, and the Dean.)	Students will take work in Pathological Anatomy (Autopsies) as posted on Bulletin Board.		
Wednesday		ELECTIVES	will register their courses at thooffice on or before March 1st	Announcement of courses on pages 67 to 73.	can be dropped without written permission of all departments concerned, and the Dean.)	ll take work in Pathological Anat posted on Bulletin Board.		
Tuesday			Students	A1	(No course ca	Students wi		
Monday								
Hour	0 0	=	<u>a</u> -		4	8	4	ıç

NOTE-The Faculty expressly reserves the right to make alterations in the curriculum schenever advisable and seithout notice.

DETAIL SCHEDULE

OF SECOND, THIRD AND FOURTH YEAR

SECTION CLASSES

SESSION OF 1923-1924

NOTE-Section periods in each instance include both dates. Sections are designated by letters; a figure following indicates a half section.

SECOND YEAR SECTIONS

Subjects	Mar. 17th— April 3d	April 4th— 24th	April 25th— May 13th	May 14th— 31st
Surgery, B. H.—Tu., S. St. M.—Th., 9.00—10.30 A.M.	A_1	A ₂	B ₁	B_2
Medicine, B.H., 4th Div. Tu., Th., S., 9—11 A.M.	B ₁	B_2	A ₁	A_2
Physical Diagnosis, C.D. Tu., Th., S., 9-11 A.M.	B_2	B_1	A_2	A ₁

THIRD YEAR SECTION-Schedule No. 2

All sections will report to the designated Department in the CORNELL CLINIC on Mondays, Tuesdays and Fridays, 2 to 3 P. M., for the period designated.

	Sept. 25-29	Oct, 1-6 †Jan.	7-10 Jan,	Oct. 14-20 †Jan.	Oct. 21-27 Feb. 4	Oct. 28- Nov. 3 Feb.	Nov. 4-14 †Feb.	Nov. 15-20 Feb.	Nov. 22-28 †Feb.	Dec. 2-8 †Feb. 28-	Dec. 10-15 †Mar,	Dec. 16-22 Mar.
	Jan. 7-12	13-16	17-23	24-28	Jan. 29.		10-16	17-20	24-27	Mar. 3	4-8	9-15
Dermatology	A	A	В	В	С	C.	D	D	E	Е	F	F
Urology	В	В	С	С	D	D	E 	E	F	F	Α	A
Ophthalmology	С	С	С	D	E	E	F	F	A	A	В	В
Laryngology*	D	D	Е	E	F	F	A	A	В	В —	C	С
Otology	E1	E ²	F	F ²	A1	A ²	B1	B ²	C1	C2	Dı	D ²
Orthopedics	F1	Es	A ¹	A^2	Bt	B^2	C1	Ca Ca	D ₁	D ²	E.	E3
Gynecology	F ²	F	Λ^2	A^1	B^2	B1	\mathbb{C}^2	C1	D^2	D1	E2	Εı

^{*}Mondays and Fridays at the Cornell Clinic, Tuesdays at the Manhattan Hospital, 214 East 64th Street, until Christmas; afterward at Cornell Clinic.

[†]Half sections or sections beneath dates thus indicated must, on the first day they report, arrange with the instructor for one evening section Tuesday or Friday 6 to 7 P.M. For abbreviations see page 74.

THIRD YEAR SECTION-Schedule No. 3

Dec. 10—22	되다	চাদ	ſΞĄ	ВВ	DQ	В	A ₁
Nov. 21 Dec. 8	西区	চা দ	H	ВВ	DC	A	B ₂
Nov. 5-20	B	B	В	oa	压压	D	೮ ೮°
Oct. 22 Nov. 3	В	ВВ	В	υa	떠또	υ	Ď,
Oct. 8—20	DC	υa	D	মদ	ВВ	Œ	편
Sept. 25 Oct. 6	OQ	DQ	D	ম্দ	В	ഥ	[편편 - 12]
	Obstetrics Recitation Monday & Thursday, 3-4 Saturday, 2-3	Obstetrics Section Monday & Thursday, 4—5 Saturday, 3—4	Obstetrics Section Tucsday & Wednesday, 5—6 Friday, 4—5	Pediatrics Recitation Monday & Thursday, 4—5 Saturday, 2—3	Therapeutics Monday & Thursday, 3—5	Neurology Monday & Thursday, 3—4	Gynecology Monday & Thursday, 3—4

May 7th— 29th	DQ14	ব্দল	OUF	Ama	D	4	OH.	Į.	ᄓ	V	0	1 B2
Ma												B ₁
pril 11th— May 6th	ODF	ERA	ODF	EBA	[24	Q	OE	В	C	Д	回	A2
April 11th- May 6th		,,,,,		700								A ₁
9th— 10th												D_2
Mar. 19th— April 10th	ODF	AMM	SDE	<¤⊞		Ĭ±,	BA	回	Ą	Ĭ	g	D1
18 18	•											면
Feb. 25th- Mar. 18	AME	AMM OUR	CH AWH	ODF	, E	O	B	D	m	O	A	F
th—												J"
Jan. 30th— Feb. 23d	AHH	ODF	Aun	PAC	В	D	ED T	A	Ex.	闰	D	ŭ
rh—											-	지
Jan. 7th- 29th	₹ ¤₩	LDC	ABH	ODM	<	В	CH	O	D	. 8	ĬŦ,	1
					fem. f.	Parker .M.	,	on, V., F.	B.H. M.	Mat.	I., F.	Hosp.
Subject	Medicine Rec. Tu., Th., S. 11 A.M.—12 N.	Medicine Rec. Tu., Th., S. 11 A.M.—12 N.	Surgery Rec. Tu., Th., S. 12 N.—1 P.M.	Surgery Rec. Tu., Th., S. 12 M.—1 P.M.	t. L & N W. F. —1 P.N	Willard- W.	Pediatrics Rec. M., F. 9—10 A.M.	M., W.	W., F.	m. W. F. 9—11 A.M.	dicine C.D.,—M., N. Y.—W. 11 A.M.—1 P.M.	Wom. ., M., F 30 A.M
Sub	Medic Tu.,	Medic Tu., 11 A.M	Surge Tu., 12 N	Surge Tu., 12 M	Surgery St. L & Mem. M. W. F. 9 A.M.—1 P.M.	ediatrics, Willard-Parker M., W. 11:30 A.M.—1 P.M.	Pediat M.	Pediatrics Section, N. C. Hosp., M., W., F. 10—11:30 A.M.	Surg. Pathology, B.H. M., W., F. 11 A.M.—1 P.M.	Obstetrics, Man. M. W. F. 9—11 A.M.	Medicine C.D.,—M., F. N. Y.—W.	Genecology, Wom. Hosp. O.P.D., M., F. 9-10:30 A.M.*
					S	Pedi 11		z	St	Obs	Me	Gen

*Half sections change Jan. 18, Feb. 10, Mar. 7, Mar. 31, Apr. 25, and May 19 at 9 A.M. Sections have 20 days each, half sections 10 days. NOTE-The Faculty expressly reserves the right to make alterations in the curriculum whenever advisable and without notice. For abbreviatons see page 74,

EXAMINATIONS AND ADVANCEMENT IN COURSE.

I. Advancement.—Students are advanced in course from one year to the next upon recommendation by heads of departments after examination in the work of that year, but examinations in major or minor subjects may, at the discretion of the Head of the Department, include all the work previously covered in the year of years preceding the examinations in question. There is, however, no unnecessary repetition of subjects taught from year to year.

II. Examinations.—Examinations for advancement in course, graduation and admission to advanced standing are held at the close of the year, except that in each course extending through a part of the year only, the examination may be held at the close of the course.

A grade of 75 per cent. is required to pass; a student failing to pass is either conditioned or dropped (see subjects of examinations, etc., pages 83 to 84).

A conditioned student may be re-examined in September.

A student who fails to pass all of his conditions in September shall not be allowed to register in the succeeding year of the curriculum, but shall be required to repeat the year.

A dropped student shall not be re-examined nor shall he be re-admitted to this College.

III. Record of Grades.—At the completion of a final examination at the end of a course the grades of each student are to be promptly compiled and submitted by the examiner to the College office for record by the Secretary, and grades once recorded are not subject to change except in accordance with the rules governing re-examination (See II.).

IV. Final Examinations.—Annual examinations are held at the end of a course, or coincident group of courses, in the hours allotted to said courses, or during the last week of the session, at the discretion of the head of the department, who will give notice of the date of examination through the office of the Secretary. All such final examinations are conducted under the direction of the head of the Department.

V. Major and Minor Courses.—Major courses are those fundamental courses in which a student completes his work in a given department or subject. Minor courses comprise the shorter laboratory and recitation courses.

Subjects of Examination for Completion of the First Year.

Major Subjects-*Anatomy.

Physiology.

*Organic Chemistry (including laboratory work).

*Histology and Embryology.

Physiological Chemistry.

Minor Subjects-*Neuro-Anatomy.

Military Science.

EXAMINATIONS AND ADVANCEMENT IN COURSE

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects.

Note-All conditions must be successfully passed before entrance into the next succeeding year will be allowed.

Subjects of Examination for Completion of the Second Year.

Major Subjects-*Physiology.

Pharmacology and Materia Medica.

Pathology.

*Bacteriology.

Minor Subjects-Medicine.

Surgery.

Obstetrics.

*Anatomy.

*Nutrition.

Hygiene.

Conditions allowed: 1 Major and 1 Minor; or 2 Minor subjects. (See note above.)

Subjects of Examination for Completion of the Third Year.

Major Subjects-*Pathology.

*Obstetrics.

Minor Subjects-Medicine.

Surgery.

Therapeutics.

*Clinical Pathology.

Pediatrics.

Neurology.

*Applied Anatomy.

*Pathological Anatomy.

*Urology.

*Otology.

Ophthalmology.

*Laryngology and Rhinology.

*Dermatology.

Psychiatry.

Conditions allowed: 1 Major and 1 Minor; or 2 Minors. (See note above.)

Subjects of Examination for Completion of the Fourth Year and Graduation.

Major Subjects-Medicine.

Surgery.

Pediatrics.

Minor Subjects-Neurology.

Orthopedic Surgery.

Gynecology.

Conditions allowed:-

^{*}In the subjects thus marked the examination is given at the end of the course, under the direction of the head of the department. In other subjects the final examination is at the end of the year.

If any student fails to pass in not more than one major, or in two minor subjects, a re-examination in those subjects may be allowed, and if the candidate is then successful the degree may be conferred.

If the candidate fails to pass in any subject at this second examination, the work of the fourth year must be repeated.

The examinations in the major subjects are allowed three hours and in the minor subjects two hours each.

REQUIREMENTS FOR GRADUATION.

- 1. Candidates for the degree of doctor of medicine must have studied medicine for four full years in an accredited medical college, and the fourth year at least must have been spent in the Cornell University Medical College.
- 2. Candidates must present satisfactory evidence of good moral character and of being not less than twenty-one years of age.
- 3. Candidates must file with the Secretary of the Faculty satisfactory evidence of having complied with the entrance requirements (see page 24), together with the requisite legal medical student certificate.

NOTE—This certificate is issued by the Department of Education of the State of New York on presentation of required credits and a diploma from a recognized College or University or properly attested certificate showing that such a diploma has been granted, together with a fee of twenty-five cents. If the student so requests, the Secretary of the Faculty may forward such diploma or certificate to the Department of Education of the State of New York with a request for the legal student certificate.

- 4. Candidates must have dissected at least one lateral half of the cadaver. They must, further, have taken the regular course of two weeks in practical obstetrics, and a certificate* covering this course must be filed at the Secretary's office before registration for the final examinations, which begin about the last week of May.
- 5. In addition to the yearly examinations above specified for advancement in course, candidates must pass during the fourth year examinations in medicine, surgery, pediatrics, and the minor subjects which are specified above.
- Candidates rejected at the final examination will not be re-examined until after having repeated the fourth year of study.

Before being readmitted to the fourth year the candidate may be required to pass a satisfactory examination in anatomy, physiology, chemistry, and the major subjects of the preceding years.

- 7. The degree will not be conferred upon any candidate who absents himself from the public Commencement without the special permission of the Faculty.
- 8. The Faculty reserves the right to terminate the connection of any student with the institution at any time on the ground of what they may deem moral or mental unfitness for the profession, or improper conduct while connected with the College.

^{*}This certificate must set forth the number of obstetrical cases personally attended by the student.

EXAMINATIONS AND ADVANCEMENT IN COURSE

DIPLOMAS OF LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS OF LONDON AND MEMBERSHIP OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

Graduates of the Cornell University Medical College are admitted to the final examinations for diploma of Licentiate of the Royal College of Physicians of London and Membership of the Royal College of Surgeons of England, upon presenting proper certificates that certain conditions applicable to the foreign universities and colleges, which are recognized by the examining board, have been complied with.

Further information may be obtained from the Secretary of the Board (Mr. F. G. Hallet) at the Examination Hall, Queen's Square, Bloomsbury, London, W. C.

Prizes.

I. For general efficiency.

In commemoration of John Metcalfe Polk, an Instructor in this College, who was graduated from the Medical Department of Cornell University on June 7, 1899, and died on March 29, 1904, an annual prize of \$500 will be presented at each Commencement to the members of the Graduating Class who have pursued the full course of study in Cornell University Medical College.

This prize will be awarded as follows:

To	the	student	having	the	highest standing	\$300
To	the	student	having	the	second highest standing	125
To	the	student	having	the	third highest standing	75

II. For efficiency in Gynecology.

In memory of William M. Polk, M.D., LL.D., Dean and Professor of Gynecology in Cornell University Medical College from its establishment in 1898 until his death, June 23, 1918, an annual prize, established by Mrs. Polk, of \$200, to the two members of the Senior Class in order of merit, for obtaining especial distinction in the Department of Gynecology.

This prize will be awarded as follows:

To the student	attaining the	highest distinction	\$125
To the studen	attaining the	next highest distinction	75
III. For efficiency	in Otology.		

Two prizes, the first of \$50, the second of \$25, are offered by Professor Whiting to the two students of the graduating class to be designated by him who make the best records in the practical and theoretical work in Otology.

Hospital Appointments.—Members of the graduating class of Cornell University Medical College are nominated for appointment to the staff of internes in the Cornell division of Bellevue and the New York and in the Memorial Hospitals in accordance with the following general plan:

1. The list of available positions having been posted, members of the graduating class make application for such services as they desire, naming not less than two choices, and agreeing to accept the position if offered.

2. A committee of the faculty determine the appointments from the list of candidates, basing the determination upon—

- a. The student's standing during his first three years in Medical College:
- b. The quality of his work in the hospital ward:
- c. Personality and general fitness for the position desired.

The nominations thus made are subject to confirmation by the faculty of the Medical College and by the hospital. The faculty expressly reserve the right to alter the method of appointment in any or all particulars, at any time, and without notice.

The students and graduates of the Cornell University Medical College are also expected to compete for positions on the resident staff of the other hospitals of the city.

Some of these hospitals are: The City, Harlem, Gouverneur, Roosevelt, Fordham, St. Luke's, St. Vincent's, St. Francis', Mount Sinai, Lenox Hill, Lebanon, Lincoln, New York Eye and Ear Infirmary, and the many hospitals in Brooklyn, Jersey City, Newark, Paterson, etc.

The requirements, the times of examination, and the period of service differ. The details can be learned by application, written or in person, to the superintendents or to the secretaries of the medical boards of the various hospitals.

A record of the hospital appointments received by the graduating class is shown in the list of Graduates at the end of the Announcement.

The Alpha Omega Alpha, an honorary medical society, has maintained a chapter in this College since 1910. The members are elected by the membership of the society on nomination from the College Office. Nominations include only those who have for three years made a scholarship average of not less than 85 per cent. Popularity and fitness for medical work are considered by the members in selecting from this list. Not more than one-sixth of each class is eligible for election. The membership from the Class of 1924 is as follows:

Benjamin Israel Ashe Samuel Hopkins Bassett LeRoy Walton Black
Ruth Foster Crabtree Bernard Samuel Fein Harlan Stabler Heim
Joseph Herzstein Evelyn Holt Winifred Kirk
William Claire Menninger Martha Chanley Souter

The Vesalian Society is a students' organization which arose from a series of Anatomical Journal Clubs started about 1910. The Anatomical Journal Club has been confined to the first year class and the Vesalian Society became the means of continuing the consideration of scientific literature by a group of interested students in the upper classes. The Society now maintains a Journal Club in each College class, with admittance to membership on the basis of effective scholarship. In addition to the class meetings there are meetings open to the public which are addressed by undergraduates and by invited guests. The purpose of the Society is to stimulate an active interest in the broader aspects of the medical sciences, to promote a fraternal spirit in and between the College classes, and to promote co-operation between undergraduates and alumni.

COURSES FOR GRADUATES

COURSES FOR GRADUATES.

For some years special courses have been offered in several of the departments, and they have been, from time to time, pursued by graduates in medicine, teachers and advanced students and research workers in the medical sciences. For the benefit of such applicants these courses have been compiled, and are listed below under the several departments by which they are offered. For a list of the teaching staff the reader is referred to the detailed statement of the several departments contained in pages 32 to 65 of this announcement.

The courses offered below with the exceptions indicated are minor courses continuing six to eight weeks. Several departments are equipped to offer co-ordinated work extending over longer periods, and such courses can be arranged for the student by consultation with the head of the department.

In general it is recommended that students applying for admission to graduate courses so far as possible arrange to take consecutive work for a period of at least one College session. Such courses will be under the immediate supervision of an instructor from the department in which the greater portion of the student's work is performed.

The faculty reserve the right to limit the number of applicants received and to alter or withdraw courses at any time without notice.

ADMISSION.

Graduates in Medicine, Arts or Science, from approved colleges, who desire to pursue courses not leading to a degree, are admitted to registration as graduate students, after approval by the head of the department. Such courses do not count in any way as a part of the four years' course required of candidates for the degree of doctor in medicine. All students or other workers pursuing courses indicated below are required to register at the office of the Secretary.

FEES.

Graduate students are admitted to any of the courses of instruction offered on the payment of a registration fee of ten dollars, an administration fee of five dollars and the tuition fee assigned to the course (see below). Those who have been previously registered as students in the Cornell University Medical College are not required to pay the registration fee.

In the courses outlined below, those marked with an * may be begun at any time during the session.

ANATOMY.

- 1. Embryology.—Terms I and II. September to March. Fee \$25. Details on page 32.
- 2.* Histological Technic.—Laboratory at least three hours daily and conferences with instructors. Fee \$25.

- 3 and 4. General Histology, Microscopical Anatomy.—Terms I and II. September to March. Details on page 32. Fee \$50.
- 5.* Dissection.—See Courses I-V, page 31. Fee \$25 per term (ten weeks); or for the entire dissection, \$50.
- 6.* Neuro-Anatomy.—Term III. March to May. Details on page 33. Fee \$25.
- 7.* Anatomical Research.—Subject to special arrangement with head of department.

PHYSIOLOGY.

- 1. Physiology.—Begins with Term III in March and continues in Term I of the following session. Details on page 35. Fee \$50.
- 2.* Physiological Research.—Subject to special arrangement with head of department.

CHEMISTRY.

- 1.* Advanced Physical and Physiological Chemistry.—Duration 10 weeks. Fee \$25.
 - 2.* Chemical Pathology.-Duration 10 weeks. Fee \$25.
 - 3.* Detection and Estimation of Poisons.-Duration 10 weeks. Fee \$25.
- 4.* Research Work in Physiological Chemistry, Chemical Pathology, or Toxicology.

Note.—Courses in this department are subject to special arrangement with head of department. Special students in this department must present satisfactory evidence of preliminary training in inorganic chemistry with laboratory work as outlined on page 25.

PHARMACOLOGY.

- 1.* Laboratory Pharmacology, under supervision and including conferences with instructor. Fee \$25.
 - 2.* Research Work in Pharmacology.

MEDICINE.

- 1. Applied Immunology. (See Bacteriology.)
- 2. Advanced Course in Metabolism Methods. (See page 41.)

CLINICAL PATHOLOGY.

- 1. Laboratory Diagnosis.—Elementary and advanced instruction is offered in all the tests commonly performed in a clinical laboratory. The time the course is given and the fee are to be arranged with Professor Thro.
 - 2. Wassermann and gonococcus complement fixation.

Professor Thro. Fee \$50.

COURSES FOR GRADUATES

SURGERY.

- 1. Clinical Clerkship.—Bellevue Hospital Second Surgical Division. Graduates in Medicine may avail themselves of a course or courses as outlined under Clinical Clerkships on page 44. One month, full time. Fee \$100.
- 2.* Operative Surgery on the Cadaver.—(Offered only to graduates in medicine.)

Course	of	5	operations	 \$20.00
"				 30.00
"	66	20	44	 40.00
"	**	40	"	 60.00
44	"	80	"	 90.00
"	**	100	"	 100.00

3. Operative Surgery.—Regular undergraduate course, in third term only begins with Term III in March. Fee \$25.

PATHOLOGY.

- 1.* Pathological Anatomy and Autopsy Technics.-First trimester.
- 2. Neuro-pathology.-Offered only in October to December.

BACTERIOLOGY.

1. Applied Immunology. Drs. Coca and Cooke. Clinical work at the New York Hospital with the collaboration of the Department of Medicine. Laboratory Course at the New York Hospital. 1 month periods, January and June. Five mornings and four afternoons a week. Fee \$200. (For further details and synoposis address the Secretary.)

NEUROLOGY.

- 1. Neuro-anatomy and Neuro-pathology.—See Departments of Anatomy and Pathology. The student must present satisfactory evidence of an adequate knowledge of general histology. Fee \$25 in each department.
- 3.* Clinical Neurology.—Includes study of ambulatory and ward cases, with medical and electrical therapeutics. Two hours daily for two months. Should be preceded by Courses 1 or its equivalent. Fee \$50.
- 4.* Psycho-therapeutics.—Twice weekly for eight weeks. Should be preceded or taken in conjunction with Course 3. Fee \$25.

DERMATOLOGY.

1.* Clinical Dermatology.—Ambulatory cases. Thrice weekly for six weeks.
 2-3 P.M. Fee \$25.

LARYNGOLOGY AND RHINOLOGY.

1.* Clinical Laryngology.—Course of 15 lessons on diagnosis and therapeutics, including operative treatment. Fee \$25.

OPHTHALMOLOGY.

- 1.* Ophthalmoscopy. 20 hours. Fee \$25.
- 2.* External Diseases of the Eye. 20 hours. Fee \$25.
- 3.* Diseases of the Eve Muscles. 15 hours. Fee \$20.
- 4.* Refraction and Retinoscopy. 20 hours. Fee \$25.
- 5.* Simulation of Amblyopia and Amaurosis. 5 hours. Fee \$20.
- 6.* Clinical Ophthalmology. Daily 2-3 P.M. Fee per month, \$25.
- 7.* Ophthalimic Operation on the Cadaver. (This course is given in cooperation with the Department of Anatomy). 20 hours. Fee \$50.
- 8.* Pathological Histology of the Eye.—(This course is given in cooperation with the Department of Pathology and must be applied for in advance.) 20 hours. Fee \$25.
- 9.* Bacteriology of the Eye.—(This course is given in co-operation with the Department of Pathology, and must be applied for in advance.) 15 hours. Fee \$20.

THE GRADUATE SCHOOL.

The Faculty of the Graduate School has control of graduate work in all departments of Cornell University and exclusive jurisdiction over the granting of all advanced degrees. Certain professors in the scientific departments of the Medical College in New York City offer graduate instruction as an integral part of the Graduate School of Cornell University. Properly qualified students may accordingly enter upon graduate work in New York City under the jurisdiction of professors in these departments and may become candidates for advanced degrees under the same conditions as apply to students in other divisions of the Graduate School. In all cases, such students are required to register each term at the Office of the Dean of the Graduate School, Giving the rules and regulations pertaining to advanced degrees and the list of departments and subjects in which graduate instruction is offered, will be sent on application to the Dean.

Graduates of the following colleges of the University, namely, the College of Arts and Sciences, the Medical College, the College of Architecture, the College of Engineering, and the New York State Colleges of Agriculture and Veterinary Medicine,—or of other institutions in which the requirements for the first degree are substantially equivalent,—are eligible for admission to the Graduate School. In other cases, studies pursued after graduation, and experience gained by professional work or otherwise are taken into consideration in deciding whether the candidate's preparation as a whole is such as to justify his admission to the Graduate School.

Graduate students resident in New York City and working under the direction of members of the Faculty connected with the Cornell Medical College are students in the Graduate School of Cornell University, and as candidates for an advanced degree are subject to all the regulations laid down by the Faculty of the Graduate School. The members of the Medical College who give instruction to graduate students constitute Group F of the Faculty of the Graduate School, and the Chairman of this Group, Professor C. R. Stockard, is a member of the General Committee of this Faculty. Graduate students in New York City are advised to acquaint themselves with the rules and regulations of the Graduate School as set down in the Announcement, and to correspond directly with the Office of the Dean of the Graduate School in Ithaca. Professor Stockard, as Chairman of Group F, will be willing to advise with graduate students in New York in regard to the details of their graduate work and plans for candidacy. Copies of the Announcement and various official forms used by the Graduate School may also be obtained from Professor Stockard.

FACULTY OF MEDICINE AT ITHACA.

- LIVINGSTON FARRAND, A.M., M.D., LL.D., President.
- ABRAM TUCKER KERR, B.S., M.D.,

 Secretary of the Medical College at Ithaca,

 Professor of Anatomy.
- SIMON HENRY GAGE, B.S.,

 Professor of Histology and Embryology, Emeritus.
- BENJAMIN FREEMAN KINGSBURY, Ph.D., M.D., Professor of Histology and Embryology.
- SUTHERLAND SIMPSON, D.Sc., M.D., F.R.S. (Edin.), Professor of Physiology.
- JAMES BATCHELLOR SUMNER, A.M., PH.D.,
 Assistant Professor of Biochemistry.
- JAMES WENCELAS PAPEZ, A.B., M.D.,

 Assistant Professor of Anatomy and Neurology.
- AARON BODANSKY, B.S., PH.D., Instructor in Biochemistry.
- HOWARD SCOTT LIDDELL, A.M., Ph.D., Instructor in Physiology.
- HOWARD BERNHARDT ADELMANN, A.M., Instructor in Histology and Embryology.
- VIOLET GRAHAM, A.M., Instructor in Biochemistry.
- JOSEPH ALMA DYE, A.B., Instructor in Physiology.
- JESSE FREMONT BATEMAN, A.B.,
 Instructor in Anatomy.
- Howard R. Harner, A.B.,

 Assistant in Histology and Embryology.
- LAWRENCE OWINS MORGAN, A.M.,
 Assistant in Anatomy.
- MARY G. PAYNE, A.B.,
 Assistant in Histology and Embryology.
- MATTHEW C. PUGSLEY, A.B., Assistant in Anatomy.
- WILLIAM M. ROGERS, B.S.,

 Assistant in Histology and Embryology.
- ELROY SHELDON, A.B.,

 Assistant in Histology and Embryology.
- Anthony J. Delario, Student Assistant in Histology and Embryology.

ITHACA DIVISION

INSTRUCTION AT ITHACA.

DURING THE FIRST YEAR OF THE COURSE.

CALENDAR FOR ITHACA.

First Term, 1924-1925.

- September 24. Wednesday—Academic year begins; matriculation of new students; University scholarship examinations begin.
- September 25. Thursday-Matriculation of new students.
- September 26. Friday-Registration of matriculated students.
- September 29. Monday—Instruction begins in all departments of the University at Ithaca.
- December 23. Tuesday-Instruction ends at 1 P.M.
- January 6. Tuesday-Instruction resumed at 1 P.M.
- January 11. Sunday-Founder's Day.
- February 4. Wednesday-First term closes.

Second Term.

- February 6 & 7. Friday and Saturday-Registration for the second term.
- February 9. Monday-Instruction begins at 8 A.M.
- April 1. Wednesday-Instruction ends at 1 P.M. (Spring recess.)
- April 8. Wednesday-Instruction resumed at 1 P.M.
- June 15. Wednesday-Commencement.

General Statement.

From its very foundation Cornell University has offered special courses for students preparing for the study of Medicine; first in the Natural History course, and later also in a special two-year Medical Preparatory course. In 1898 the Medical College was established in New York City with a four years' course. At the same time the work of the first year was duplicated at the University in Ithaca, since many of the fundamental scientific subjects of which this part of the course mainly consists were already provided for in the long-established departments of Botany, Zoology, Comparative Anatomy, Physics, Chemistry, Physiology, Histology, Embryology, and Bacteriology. The courses in these departments were modified where necessary and additional courses were added so as to make the work at Ithaca equivalent to the first year in New York City.

Other Colleges of the University.—Among the facilities of the University of special value to the Medical College may be mentioned the museums of Vertebrate and Invertebrate Zoology (including Entomology and Comparative Anatomy), of Agriculture, of Botany, of Geology, and of Veterinary Medicine. The University Library, with its 637,352 volumes and pamphlets, and over 2,000 current periodicals and transactions, is as freely open to medical students as to other University students.

Stimson Hall. This is a modern and thoroughly equipped laboratory building erected for the Medical College at Ithaca in 1902. It was made possible through the generosity of the late Dean Sage of Albany and named at his desire Stimson Hall in recognition of the services rendered by Dr. Lewis A. Stimson toward the establishment of the Medical College. The building was especially designed for teaching and research in anatomy, histology, embryology, and physiology. The building is constructed of Ohio sandstone. The general form is that of an E, 157 feet long and 50 feet wide with wings 40 feet square.

In the cellar are the cold-storage, embalming, cremating rooms and storerooms. In the sub-basement at the west end is a large room for the string galvanometer and the accessory dark rooms.

In the basement are the ventilating and cold-storage machinery, a large lecture room, a recitation room, and an advanced laboratory for biochemistry and histology, besides the lower part of the large amphitheatre. Here also is located the operating room for the department of physiology.

On the first floor are located the coat rooms for men and women, college office, library, reading room, faculty room, and histology and embryology research laboratory, general laboratory for experimental physiology, demonstration and dark room for physiology, and the upper part of the large amphitheatre.

On the second floor is the department of histology and embryology with a large general laboratory, a research laboratory, preparation rooms, and private laboratories for the instructors. Upon this floor also is located the department of Physiology with a large general laboratory for biochemistry, a research laboratory for biochemistry, a research laboratory for biochemistry, an incubator room, repair shop and private laboratories for the instructors.

The third floor consists of the general and special dissecting rooms for gross anatomy and neurology, study rooms, and amphitheatre, besides rooms for the instructors.

The attic is utilized for photography, macerating the skeletons, and for storage.

The air in the building is constantly changed by forced ventilation. The lighting is especially good in all the rooms.

In the court behind the building is a house for alcohol and inflammables and provision for experimental animals, including a small animal house. A large animal house is located at some distance from the medical building on the University farm.

The VanCleef Memorial Library. Located in Stimson Hall, this library, endowed by Mr. Mynderse VanCleef in honor of his brother, Dr. Charles VanCleef, supplements the extensive facilities of the University Library by a steadily growing collection of reference works and periodicals of importance for the work of instruction and research conducted in Stimson Hall. The library room is lighted by indirect overhead light, and the reading desks are provided with day-lite lamp fixtures.

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Experimental Field Station. A recent and important adjunct to the Department of Physiology is an Experimental Field Station which consists of nine acres situated in the open country about two miles from the Medical College. In this fenced field a barn for the accommodation of large animals such as sheep and goats, and proper houses with runs for small animals have been provided. In such a station animals under observation in feeding and nutrition experiments, for example, may be kept under ideal conditions for long periods of time. Communication between the station and the laboratory is maintained by a motor truck belonging to the department.

The Sarah Manning Sage Research Fund. As a recognition of the importance of the research side of university work, and as a timely and generous gift, there came in 1916 a bequest of \$50,000 by the will of Sarah Manning Sage, widow of Dean Sage, the donor of Stimson Hall. The income of this sum, or in the discretion of the University the principal also, shall be used to promote the advancement of medical science by the prosecution of research in the Cornell University Medical College at Ithaca, in connection with any and all subjects at any time embraced in the curriculum.

DEPARTMENTS, METHODS AND FACILITIES. ANATOMY.

ABRAM T. KERR, B.S., M.D., Professor.

James W. Papez, A.B., M.D., Assistant Professor of Anatomy and Neurology.

J. Fremont Bateman, A.B., Instructor.

LAWRENCE O. MORGAN, A.M., Assistant.

MATHEW C. PUGSLEY, A.B., Assistant.

The courses in anatomy are designed to provide a comprehensive and detailed study of the structure of the human body.

The work in gross anatomy is mostly concentrated in the first term of the first year. The laboratory is open from eight to five week days, except Saturday afternoon. Twenty-eight hours a week are allowed for the required work in the first term and four hours a week in the second term. Students who have additional hours free may devote more time to the subject. The work consists mainly of dissection followed by recitation on the part dissected. For this work there is an ample supply of dissecting material well embalmed and kept in cold storage ready for use. Each student is required to do a clean and careful dissection of a lateral half of the body. The regional method of dissection is followed. The student is furnished a systematic laboratory outline so arranged where possible that the structures in each region can be studied together as a topographic, functional or surgical area. It is realized that no one method or point of view is sufficient or applicable to every region. The purpose throughout is to make the student find and identify every structure, to appreciate its functional significance, its relations and its peculiar characteristics, to assemble details into general concepts, to visualize and interpret every region and organ. The aim is to direct the student to work methodically, to observe carefully and to think clearly and independently. He is encouraged to make careful notes and as many drawings as time permits. Where feasible, he is taught to compare his findings on the cadaver with conditions in the living body. An X-ray outfit in the department makes it possible in many regions to compare the X-ray picture from the cadaver with the findings in the dissection. A complete disarticulated skeleton is loaned to each student so that the bones may be available for study when encountered in course of dissection. In addition the department is well equipped with models, cross sections, and special dissections for study and demonstration. For study of the finer structure of the organs, hand lenses and several binocular dissecting microscopes are provided in the laboratory. A student library containing atlases and some of the more important anatomical monographs is in connection with the laboratory. Besides the usual regional recitation on the dissected part, demonstration conferences are held about three times a week with the class as a whole or with smaller groups. Occasional lectures are given on matters that cannot be made clear by dissection and demonstrations.

The work in the anatomy of the nervous system and sense organs is given during the second term. It consists mainly of laboratory work with frequent conferences and recitations. A topographic study and dissection of the organ or part precedes or accompanies its microscopic study. Special attention is

ITHACA DIFISION

given to the sense organs, nerves, nuclei, reflex connections, conduction tracts and cortical areas that enter into the formation of the more important functional systems. In connection with each organ or part, its development and comparative morphology is considered. For this work an ample supply of human brains, brains of lower mammals, Weigert sections, and other preparations are available.

The department is well equipped to provide facilities for those properly qualified to undertake advanced and research work. Students with special ability or training are permitted to do more than the required work. Where time permits they are encouraged to do advanced or research work.

- 1. Anatomy of the Head and Neck.—First term. Credit, 4 hours, 25 actual hours a week for 6 or more weeks. Professors Kerr and Papez, Instructor Bateman, and assistants. Laboratory work, dissection, and conferences.
- 2. Anatomy of the Thoracic Walls and Viscera.—First term. Credit, 1 hour, 25 actual hours a week for 2 or more weeks. Professors Kerr and Papez, Instructor Bateman, and assistants. Laboratory work, dissection, and conferences.
- 3. Anatomy of the Abdominal and Pelvic Walls and Viscera.—First term. Credit, 4 hours, 25 actual hours a week for 6 or more weeks. Professors Kerr and Papez, Instructor Bateman, and assistants. Laboratory work, dissection, and conferences.
- 5. The Nervous System, Anatomy, Histology, and Development.—Second term, credit, 3 hours, Assistant Professor Papez. Nine hours a week laboratory with laboratory demonstrations, conferences and recitations. Dissection of the spinal cord and brain. Microscopic structure and development of the nervous system and organs of special sense.
- 6. Anatomy of the Living Body.—First term. Credit, 2 hours, 3 actual hours a week. Professor Kerr. Interpretation of dissecting room material by means of the living body, frozen sections, and special preparations. A review of the work of courses, 1, 2, and 3.
- 7. Anatomy of the Upper Extremity.—First term. Credit, 2 hours, 25 hours a week for 2 or more weeks. Professors Kerr and Papez and assistants. Laboratory work, dissection, and conferences.
- 8. Anatomy of the Lower Extremity.—Second term. Credit, 2 hours, 4 hours a week for 16 weeks. Professors Kerr and Papez and assistants. Laboratory work, dissection, and conferences.
- 9. Topographical Anatomy.—First and second terms. Credit, 2 to 5 hours. Elective. Prerequisite, anatomy courses 1, 2, 3, 7, or 8. The detailed dissection and study of any region. Professor Kerr.
- 12. Research in Anatomy.—First and second terms. Professors Kerr and Papez. Advanced and research work in the laboratories. Open only to those who have taken the necessary preliminary courses, and are properly qualified.

HISTOLOGY AND EMBRYOLOGY.

BENJAMIN F. KINGSBURY, Ph.D., M.D., Professor. HOWARD B. ADELMAN, A.M., Instructor. HOWARD R. HARNER, B.S., Assistant. MARY G. PAYNE, A.B., Assistant. WILLIAM M. ROGERS, B.S., Assistant. ELROY SHELDON, A.B., Assistant. ANTHONY J. DELARIO, Student Assistant.

As indicated by the following courses, this department offers elementary and advanced instruction in the theory and use of the microscope and its accessories, in histology, and embryology; and opportunities for research in all of these subjects.

The material equipment consists of a good supply of modern microscopes, while camera-lucidas, polariscopes, micro-spectroscopes, photo-micrographic cameras, microtomes and other special apparatus such as dark-field illuminators are in sufficient numbers to give each student opportunity for personally learning to use them, and for applying them to any special study in which they are called for. Two projection microscopes are available for class demonstrations and for making the drawings used in reconstruction.

The rooms for the use of the department are on the second floor of Stimson Hall. They are almost perfectly lighted and consist of a large general laboratory, an advanced laboratory, a preparation room, department office, and five private laboratories for the instructing staff, where also special demonstrations of difficult subjects are given to small groups of students.

The collection of material and microscopic series of human embryology, contributed mainly by graduates of the college, is steadily growing. Every encouragement is given for the fullest utilization of the opportunities afforded by the department.

The work of the department consists of practical laboratory work, supplemented by lectures, conferences, and demonstrations. The work required of students of medicine is given in course 10. For those who have already had elsewhere satisfactory work in histology, elective work may be taken in Courses 3, 7, and 8. Courses open to students in the College of Arts and Sciences and Veterinary Medicine are described in the announcements of these colleges.

COURSES REQUIRED OF STUDENTS OF MEDICINE.

10. Histology.—First term. Credit, 8 hours. Professor Kingsbury and assistant. Required of first-year students of medicine. Four laboratory periods and four lectures each week. The work includes (a) The fundamentals of human development; (b) The histology of the tissues and organs (except the nervous system); (c) The main facts of histogenesis and the development of the organs (except the nervous system). It is highly advantageous that the course be preceded by a course in embryology (see Courses of Instruction of the College of Arts and Sciences, Course 4).

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ADVANCED AND ELECTIVE COURSES.

3. Special Histology and Technique.—First term. Credit, 2 hours. Instructor Adelmann. One recitation, demonstration, or lecture. Two laboratory periods, M. W. 2-4:30.

In this course a more detailed knowledge of histology and facility in technique is gained by practical work in one or more of the fields of histology or embryology. Designed for those who desire a better working knowledge of histology for use in Biology or Medicine.

7. Advanced Work in Histology and Embryology.—First and second terms. Professor Kingsbury and Instructors. Laboratory work, eight or more actual hours a week, with Seminary (Course 8).

This course is designed for those preparing theses for baccalaureate or advanced degrees, and for those wishing to undertake special investigations in histology and embryology.

Course 7 is open to those who have had Courses 10 and 3, or their equivalents. A good reading knowledge of French and German is indispensable for the most successful work in this course. It is suggested that those who intend to take this course confer with the head of the Department as early as possible, so that the work may be planned to the best advantage.

8. Seminary.—First and second terms. One hour each week at an hour to be arranged.

For the discussion of current literature and the presentation of original work by the members of the Department staff and those doing advanced work in the Department. It may be taken in connection with Course 3 or Course 7.

DEPARTMENT OF PHYSIOLOGY AND BIOCHEMISTRY.

SUTHERLAND SIMPSON, M.D., D.Sc., F.R.S. (Edin.), Professor of Physiology. JAMES B. SUMMER, A.M., Ph.D., Assistant Professor of Biochemistry.

A. Bodansky, B.S., Ph.D., Instructor in Biochemistry.

H. S. LIDDELL, A.M., Ph.D., Instructor in Physiology. V. GRAHAM, A.M., Instructor in Biochemistry.

J. A. Dye, A.B., Instructor in Physiology.

Physiology.

This subject is taught in the second term of the first year of the medical curriculum. It is the aim of the department to give the students a thorough training in the fundamentals of the science of physiology, which was formerly known as the Institutes of Medicine, and an effort is made to strike the proper balance between the study of theoretical principles in the lecture room and the practical application of these in the laboratory.

The work in physiology is given in the second term. Nine hours a week are devoted to practical exercises, special attention being given to experimental methods which are likely to be of importance in the study of clinical medicine.

In the laboratory, from year to year, less and less time is taken up with frog physiology and more and more time devoted to a practical study of mammalian functions. This is made possible by the fact that the department now possesses six large Brodie kymographs of the most recent pattern for the exclusive use of medical students.

The following courses are offered:

- Physiology of Muscle and Nerve; reflex, central and autonomic nervous systems; special senses; digestion, absorption and endocrine organs.—Credit + hours. Professor Simpson, Dr. Liddell, Instructor Dye and assistants. Four lectures or conferences weekly throughout the term. Written and oral examinations will be held at intervals.
- 4. Experimental Physiology.—Credit 4 hours. Professor Simpson, Dr. Liddell, Instructor Dye and assistants. Two laboratory periods of six and three hours each week. The fundamental experiments of the science dealt with in the systematic lectures will be carried out practically by the students themselves under the direction of the professor and instructors. Demonstrations, oral and practical examinations will be given from time to time.
- 8. Advanced Work and Research.—The laboratory is open daily from 8 A.M. till 6 P.M. for advanced work and original investigation under the direction of the professor and assistants.

Biochemistry.

In this section the student is taught the chemistry of the tissues, fluids, secretions, and excretions of the human body; the compositions of food-stuffs, and the phenomena of their digestion, absorption, and assimilation; the rôle of enzymes in the animal economy; the principles of nutrition; and the leading facts of general and special metabolism. Groups of organic compounds of especial biological importance will be discussed emphasizing particularly the carbohydrates, purins, amino acids, and fats. The fundamental properties of electrolytes and colloids and the phenomena of osmosis and dialysis will be considered in lecture room and laboratory. Instruction is given in the use of analytical methods for the examination of biological products, both normal and pathological. Those methods are principally considered which have found an application in scientific medicine, and special attention is devoted to the quantitative analysis of the gastric contents, blood, and urine. Each student completes the course by performing a metabolism experiment upon himself.

The bulk of the instruction is given in the laboratory. As occasion arises, the student's individual work there is supplemented by experimental demonstrations; while by means of lectures and recitations it is sought to co-ordinate the whole, and to expound the theoretical aspects of the subject.

The following courses are offered:

15. General Biochemistry.—Second term. Credit, 9 hours. Five lectures or recitations and four three-hour laboratory periods weekly; supplemented by

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demonstrations, conferences and written reviews. Assistant Professor Sumner, Dr. Bodansky and Miss Graham. Required of first year students of medicine.

- 17. Special Chapters in Biochemistry.—First term. Credit, 1 hour. Assistant Professor Sumner. One lecture weekly on some selected province of biological chemistry. Hour to be arranged. This is an elective course for advanced students or graduates.
- 20. Advanced and Research Work in Biochemistry.—First and second terms. Assistant Professor Sumner. The laboratory is open daily to all qualified persons for advanced instruction or the prosecution of research. Courses are arranged to suit the training and requirements of the individual student.

SCHEDULE AND SUMMARIZED STATEMENT.

In this schedule the counts or University hours are given on the following basis: One recitation or lecture weekly for one term or half year gives a credit of one; for laboratory work it requires two and one-half actual hours weekly for a term or half year to secure a credit of one.

SCHEDULE OF REQUIRED COURSES.

First Term.

	No. of Course	University Hours	Actual Hours Weekly
Anatomy	1 to 3, 7	11	25
Anatomy	6	2	3
Histology	10	8	16
		_	
		21	44
Second Term.			
Anatomy	8	2	4
Physiology	1, 5	4	4
Physiology	4	4	9
Nervous System	5	3	9
Biochemistry	15	9	17
		22	43

SUMMARY OF REQUIRED COURSES.

- 1. Anatomy of the Head and Neck.—Credit, 4 hours, 25 actual hours a week for 6 weeks. Professors Kerr and Papez, Instructor Bateman and assistants. Laboratory work, dissection, and conferences.
- 2. Anatomy of the Thoracic Walls and Viscera.—Credit, 1 hour, 25 actual hours a week for 2 weeks. Professors Kerr and Papez, Instructor Bateman and assistants. Laboratory work, dissection, and conferences.
- 3. Anatomy of the Abdominal and Pelvic Walls and Viscera.—Credit, 4 hours, 25 actual hours a week for 6 weeks. Professors Kerr and Papez, Instructor Bateman and assistants. Laboratory work, dissection, and conferences.
- 6. Anatomy of the Living Body. Credit, 2 hours, 3 actual hours a week. Professor Kerr.
- 7. Anatomy of the Upper Extremity. Credit, 2 hours, 25 hours a week for 2 or more weeks. Professors Kerr and Papez and assistants.
- 10. Histology.— Credit, 8 hours. Professor Kingsbury and assistant. Four laboratory periods and four lectures each week.

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Second Term.

- 1. Physiology of Cell, Muscle, Nerve, Heart and Circulation, and Respiration—Credit, 4 hours. Professor Simpson, Instructors Liddell and Dye, and assistants. Four lectures or recitations weekly throughout the term with demonstrations and examinations.
- 4. Experimental Physiology.—Credit, 4 hours. Professor Simpson, Instructors Liddell and Dye, and assistant. Two laboratory periods of three and six hours a week. This course will be supplemented by demonstrations whenever necessary.
- 15. General Biochemistry.—Credit, 9 hours. Five lectures or recitations and four three-hour laboratory periods weekly, supplemented by demonstrations, conferences, and written reviews. Assistant Professor Sumner, Dr. Bodansky and Miss Graham.
- 5. The Nervous System Anatomy, Histology, and Development.— Credit, 3 hours. Assistant Professor Papez. Nine actual hours a week. Dissection of the spinal cord and brain. Microscopic structure of the nervous system and organs of special sense.
- 8. Anatomy of the Lower Extremity.—Credit, 2 hours, 4 actual hours a week. Professors Kerr and Papez and assistants.

REOUIREMENTS FOR ADMISSION.

The requirements for admission are identical with those of the Medical College at New York City (see page 26.)

GRADUATE WORK AT ITHACA.

ADMISSION.

The Graduate School has exclusive control of all graduate work carried on in the University. Graduates of the following colleges of Cornell University, namely, the College of Arts and Sciences, the College of Architecture, the College of Engineering, the Medical College, the New York State College of Agriculture, and the New York State Veterinary College, and also graduates of other institutions in which the requirements for the first degree are substantially equivalent, are eligible for admission to the Graduate School. In other cases studies pursued after graduation, and experience gained by professional work or otherwise, are taken into consideration in deciding whether the candidate's preparation as a whole is such as to justify his admission to the Graduate School. Graduates of colleges other than those of Cornell University may be admitted to the Graduate School, but not to candidacy for an advanced degree, if their training is regarded as less than one year short of that required for the first degree at Cornell University.

In order to be admitted to the Graduate School, a student must furnish evidence that he has already received a first degree, by presenting either a diploma or a statement from some official source. The simplest procedure will ordinarily be to submit an official statement from the registrar or dean that the degree has been conferred. In the case of graduates of Cornell University this is not necessary, since the records are conveniently accessible.

To avoid delays at the beginning of the academic year, those who desire to enter the Graduate School are advised to make application for admission, either in person or by letter, in the preceding spring or summer. Correspondence should be addressed to the Dean of the Graduate School, Cornell University, Ithaca, New York.

For details in regard to the selection of major and minor subjects, special committees in charge of the work of each candidate for an advanced degree, fees, time required, thesis, and special conditions to be fulfilled by each candidate for an advanced degree, reference should be made to the announcement of the Graduate School.

FACILITIES.

The facilities of the Departments of Anatomy, Histology and Embryology, Physiology and Biochemistry, have been outlined under the description of each department. These are equally available for the use of the graduate students as for medical students.

FELLOWSHIPS AND GRADUATE SCHOLARSHIPS.

Among the twenty-four fellowships and eighteen scholarships offered annually to students in the Graduate School, the following are of particular interest to students continuing work in biological sciences:

ITHACA DIVISION

The Schuyler Fellowship in Animal Biology (annual value of \$400 and free tuition in the Graduate School).

The Graduate Scholarship in Animal Biology (annual value of \$200 and free tuition in the Graduate School).

THE COMBINED A.B. AND M.D. DEGREES.

It will be seen from Section II of the requirements for admission that the two degrees, Bachelor of Arts and Doctor of Medicine, may be obtained in seven years. The first three years must be taken in a College of Arts and Sciences. The fourth year is the first year in the Medical College, and may be pursued either at Ithaca or in New York City. At the end of it the student receives the degree of A.B. The last three years are taken entirely in the Cornell University Medical College at New York City.

For the convenience of the college students preparing for Medicine, two plans for the first three years in the College of Arts and Sciences of Cornell University are given below. These include the special underclass requirements of the College of Arts and Sciences of Cornell University in English and Public Speaking; Foreign Languages; Physics; Mathematics and Chemistry; Biological Sciences; Philosophy and Psychology; History; Economics and Government; the upperclass requirement of ten hours in one selected group in the third year; and also the special work in Physics, Chemistry, Biology, English and Moden Foreign Language required for entrance to the Cornell University Medical College.

Schedule I applies to students who continue with one of the foreign languages which they offered for entrance. Schedule II is for students who choose to begin a new foreign language rather than to continue with one of those taken in High School.

SCHEDULE I.

First Year		1st Term. Hours	2nd Term.
	Course No.		
Zoology (General)	1	3	3
Physics (General)	3	6	-
English	1	3	3
Modern Foreign Language (Advanced)	-	3	3
History	-	3	3
Chemistry (General Inorganic)	101	-	- 6
			_
		18	18
Second Year			
Zoology (Comparative Anatomy)	3	3	3
Chemistry (Qualitative and Quantitative			
Analysis)	210,225	3	3
Psychology (Elementary)	1	3	-

Second Year (continued)	Course No.	Hours	2nd Term Hours Credit.
Psychology or Philosophy	-		3
Physics (Laboratory)	5.5	3	_
Economics (Elementary)	51	5	_
Elective	- J1	_	9
	_	_	,
		17	18
Third Year			18
Histology (The Tissues and Histogenesis)	1	4	_
Embryology of Vertebrates	4	_	4
Anatomical Methods	22	3	_
Chemistry (Organic)	375	6	_
Electives	-	5	14
•		_	
		18	18
. COURDINE II		10	10
First Year SCHEDULE II.			
Zoology (General)	1	3	3
Physics (General)	3	6	_
English	1	3	3
Modern Foreign Language (Elementary)	_	6	5
Chemistry (General Inorganic)	101		6
g, (g,		_	_
		18	17
Second Year		10	.,
Zoology (Comparative Anatomy)	3	3	3
Chemistry (Qualitative and Quantitative			
Analysis)	210,225	3	3
Psychology (Elementary)	1	3	
Psychology or Philosophy	-		3
Physics (Laboratory)	55	3	
Modern Foreign Language (Advanced)	-	3	3
Electives	-	3	
Economics	51	-	5
		18	17
Third Year			
Histology (The Tissues and Histogenesis)	1	4	_
	4	_	4
Embryology of Vertebrates	22	- 3	_
	375	6	
Chemistry (Organic)	3/3	3	3
History	-	2	-
Electives	-	4	11
			_
		18	18

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The electives would vary with the individual but it is advised that students obtain a reading knowledge of both French and German More than one year of English is also very desirable. In modifying the above outline, it should be kept in mind that the required subjects must be completed although their position in the schedule may be shifted.

It is strongly recommended that freshmen should plan at the beginning of their course the work of the three years in Arts. The Secretary of the Medical College will be glad to confer with students who expect to study medicine and to help them arrange their plan of Arts work so as to meet best their individual needs.

RESIDENCE AND REGISTRATION.

The college year is nine months long, extending from the last of September till about the middle of June, and is divided into two nearly equal terms. (For exact dates, see calendar on page 95).

No credit is given for work done in absentia. For leave of absence during the session, application should be made to the Secretary.

At the beginning of the term students must register with the University Registrar, in Morrill Hall. After registration with the University Registrar, they must register with the Secretary of the Medical College, in Stimson Hall.

EXAMINATIONS.

Students are advanced in course from one year to the next upon passing examinations upon the work of that year. The work of each year is considered final of itself. There is no unnecessary repetition of subjects taught from year to year. According to the usage of the other colleges, the University student found to be markedly deficient will be dropped from the College at the end of the term in which such deficiency is shown. In the case of a student so dropped, an application for re-admission will not be considered at all until after the expiration of one term.

ADVANCEMENT FROM FIRST TO SECOND YEAR.

Upon the completion of the year in Ithaca, a transcript of the record of each student, together with a statement that such student is recommended for admission to the second year class is transmitted by the Faculty at Ithaca to the Faculty of the Medical College in New York City. As a student is not advanced from one year to another in the New York division until all the work of the year is completed, a student from Ithaca cannot enter the second-year class in New York until the entire schedule of the first year has been successfully completed. For removing any conditions, examinations are held at the beginning of the fall term, both in Ithaca and in New York City. The student is at liberty to take these examinations in Ithaca or in New York City. The examination on a subject in either place is final for that year. That is, the student will not be permitted to try an examination on a subject in Ithaca, and take advantage of the later date for the examination in New York to have a second examination on the same subject in the same autumn.

CHARGES FOR INSTRUCTION.

FIRST YEAR.

Matriculation	\$10.00
Tuition	300.00
Laboratory Fees	35.00

\$345.00

All tuition and other fees may be changed or increased by the Trustees to take effect at any time without previous notice.

To secure payment for breakage of instruments, apparatus, etc., each student is required to deposit with the treasurer \$10. This deposit, less the amount charged for breakage, will be returned at the end of the year.

Applications for Registration in the Medical College Must be Made by March 1, and a Deposit of \$50 is Required If Accepted.

Any prospective undergraduate student intending to register in the Medical College at Ithaca for the first term of the academic year must apply for registration not later than March 1 of that year. An application received after March 1 may be accepted if, in the judgment of the Faculty concerned there is adequate provision for the student's instruction. A deposit of \$50 is required as soon as the application is acted on favorably by the Committee. If a student completes his registration for the first term the deposit will be credited to his account. If a prospective student whose application and deposit have been accepted fails to complete his entrance requirements he is entitled to a refund of the deposit in excess of accrued charges. If an applicant fails for any other reason to enter the University at the beginning of the term there may, in the discretion of the Comptroller and the Registrar, be refunded to him any balance above charges accrued. Such a refund will generally be made where the vacancy caused by the student's withdrawal is filled.

RESIDENTIAL HALLS.

The University has six residential halls for men students situated on the Campus and furnishing accommodations for about 480 men. For particulars address University Treasurer, Ithaca, N. Y. There are, also, many private boarding and rooming houses near the University Campus. In these the cost of board and furnished room, with heat and light, varies from \$10 to \$15 a week. By the formation of clubs, students are sometimes able to reduce their expenses for room and board. Cafeterias are maintained by the University in Cascadilla Hall and near the Baker Dormitories, and one by the College of Agriculture in the Home Economics Building, where meals may be obtained at reasonable prices.

Before engaging rooms, students should carefully examine sanitary conditions and should particularly insist on satisfactory and sufficient fire escapes. The University publishes and distributes a list of approved rooming houses. This list is ready for distribution August 15. New students are advised to come to Ithaca a few days in advance of the beginning

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of the University duties in order that they may have ample time to secure room and board before the opening of the academic year. The Freshman Advisory Committee offers its assistance to new students in the selection of rooming and boarding houses.

The residential halls for women students are Sage College and Prudence Risley Hall. In these buildings, which are exclusively for women students, the total cost of board, laundry and rent of furnished rooms, with heat and light is \$460 a year. The halls are heated by steam, and lighted by electricity. The Dean of Women has jurisdiction over all women students in the University, and women students are not permitted to board and lodge outside of the halls for women except in houses approved by the Dean, and subject to her direction. Prospective women students should write to the Dean of Women for information concerning any matters in which they may need assistance. Dormitory facilities for women are inadequate, and prospective students desiring such accommodations are urged to make early application. Inquiries in regard to board and rooms in the women's halls should be addressed to The Manager of Residential Halls, Sage College, Ithaca, N. Y.

ITHACA, N. Y.

FIRST YEAR--SESSION 1923-1924--FIRST TERM

	8 _		10	11	12	2 3 4
Mon.	Anatomy	Histol.		Histology		Anatomy
Tues.			Anatomy			Anatomy
Wed.	Anatomy	Histol.		Histology		Anatomy
Thurs.		V -	Anatomy			Anatomy
Fri.	Anatomy	Histol.		Histology		Anatomy
Sat.		Histol.		Histology		

FIRST YEAR-SESSION 1923-1924-SECOND TERM

	8	9	10	11	12	2	3	4
Mon.		ANAT	ОМУ			Ne	rvous Sys	tem
Tues.	Biochem.	Physiol.		Physiology			Physiology	
Wed.	Physiol.	Biochem.	Ne	Nervous System Biochemist		iochemistr	у	
Thurs.	Biochem.	Physiol.	Physiology		Net	rvous Syst	em	
Fri.	Physiol.	Biochem.	В	liochemistr	у .	В	iochemistr	у
Sat.		Biochem.	. 1	Biochemist	ry			

GRADUATES, 1923

Doctors of Medicine, June 8, 1922.

Adlerblum, CullenLenox Hill Hospital
B.A., 1912, College of the City of New York.
Applebaum, JacobBeth Israel Hospital
A.B., 1919, College of the City of New York.
Auster, Lionel Sandler
A.B., 1919, College of the City of New York.
Bean, Francis Jarvis
A.B., 1917, Clark College. Berglas, Jacob Baruch
A.B., 1919, Cornell University. Berke, Morris
A.B., 1920, Cornell University.
Berkoff, Harry Sidney
A.B., 1920, Cornell University.
Berkowitz, Joseph JudahSt. Mark's Hospital
B.S., 1918, College of the City of New York.
Bonnett, Earl Cluff
A.B., 1920, Cornell University.
Brodie, Melvin MorrisLincoln Hospital
B.S., 1917, College of the City of New York.
Brown, Charles AlfredStaten Island Hospital
A.B., 1918, Yale University.
Byron, Charles Stanford
A.B., 1920, Cornell University.
Dannis, DavidLincoln Hospital
B.S., 1919, College of the City of New York.
Donner, Samuel
A.B., 1918, Yale University.
Elliott, William PerryNew York Hospital
A.B., 1919, Cornell University.
Feitelberg, Abraham
A.B., 1920, Cornell University.
Fischer, Alfred Elias
Flagg, Alfred GlennonFrench Hospital
A.B., 1918, Clark University.
Freilich, Sidney Harold
B.S., 1919, College of the City of New York.
Froomess, Sara AureliaWorcester Memorial Hospital, Worcester, Mass.
A.B., 1917, Hunter College.
Gallup, Theodore
A.B., 1918, St. Lawrence College.
-

Glaser, JeromeMichael Reiss Hospital
A.B., 1919, Cornell University.
Globus, Isabel
A.B., 1919, Hunter College.
Gove, Richard EverestBridgeport Hospital, Bridgeport, Conn.
A.B., 1920, Cornell University.
Hansson, Kristian Gosta
A.B., 1920, Cornell University.
Heimbach, Robert ElwoodN. Y. State Hospital for Incipient Tuberculosis
A.B., 1917, Princeton University.
Hochman, Samuel
B.S., 1918, Cornell University.
Hopper, Marjorie Ross
A.B., 1919, Smith College.
Iserman, Michael
B.S., 1919, College of the City of New York.
Jackson, Myron RobinsonBellevue Hospital
B.S., 1919, Trinity College.
Jacobs, Benjamin
B.S., 1919, College of the City of New York.
Jensen, Leif GeorgeStaten Island Hospital
A.B., 1920, Columbia University.
Kantor, Charles
B.S., 1919, College of the City of New York.
Klein, Hyman
A.B., 1920, Cornell University.
Kroin, Harry EsslierBeth Moses Hospital, Brooklyn
A.B., 1920, Cornell University.
Levine, Philip
B.S., 1919, College of the City of New York.
Levy, Lawrence
B.S., 1917, College of the City of New York.
Mabee, Jennie Elizabeth
A.B., 1919, Cornell University.
Marquith, LeoMountainside Hospital, Montclair, N. J.
A.B., 1919, College of the City of New York.
McDermott, John FrancisSt. Francis Hospital, Hartford, Conn.
B.S., 1917, Union College.
Merriss, Margaret GraceBellevue Hospital
A.B., 1914, Cornell University.
Morris, Ruth MaeFifth Avenue Hospital
A.B., 1919, Wellesley College.
Müller, Gladys MarieBellevue Hospital
A.B., 1917, Cornell University.
Murphy, Eleanor Janet
RA 1918 MA 1919 University of Wisconsin

Nerenstone, Samuel HLincoln Hospital
B.A., 1918, College of the City of New York.
Oppenheim, Charles JuliusLenox Hill Hospital
Ph.B., 1917, M.S., 1919, University of Chicago.
Perkel, Louis LeoJersey City Hospital
B.S., 1919, New York University.
Reichert, Philip
A.B., 1918, College of the City of New York.
Rosenberg, LesterBellevue Hospital, 4th Division
B.S., 1917, College of the City of New York.
Shiffer, Joseph
A.B., 1920, Cornell University.
Silber, Samuel
B.S., 1919, College of the City of New York.
Thompson, Sidney Attilio
A.B., 1918, Wesleyan University.
Tolstoi, EdwardRussell Sage Foundation
B.A., 1919, Yale University.
Vernick, Samuel W
B.S., 1919, College of the City of New York,
Walker, William AllenRochester General Hospital, Rochester, N. Y.
A.B., 1920, Cornell University.
Weinreb, Samuel
B.S., 1920, College of the City of New York.
Weinstein, SamuelMountainside Hospital, Montclair, N. J.
B.S., 1920, College of the City of New York.
Weiss, Soma
(ex. 1920), University of Budapest, A.B., 1921, Columbia University.
White, Harriet MarionBellevue Hospital, 4th Div.
A.B., 1914, Vassar College.
Wicker, Mildred MarieBellevue Hospital
A.B., 1919, Cornell University.
Wigdor, Meyer
B.S., Feb. 1917, A.M., 1917, Cornell University.
Wincor, Abraham LincolnBellevue Hospital
A.B., 1920, Cornell University.
Witter, Margaret ShepardBellevue Hospital, 1st Div.

A.B., 1917, Smith College.

STUDENTS, 1923-1924

Candidates for the Degree of Doctor of Medicine.

FOURTH YEAR.

• FOURTH YEAR.
Henri Ernest Abel, A.B., 1920, Colgate UniversityElizabeth, N. J. Benjamin Israel Ashe, B.S., 1920, College of the City of New York, Brooklyn, N. Y.
Samuel Hopkins Bassett, A.B., 1920, Cornell University,
Coleman's Station, N. Y.
Charles Edward Harold Bates, A.B., 1921, Stanford University. Alameda, Cal.
Barbara Beattie, A.B., 1920, Vassar CollegeLittleton, N. H.
LeRoy Walton Black, Ph.B., A.M., 1920, Brown University, Rutherford, N. J.
Joseph Roosevelt Breitbart, A.B., 1920, Ohio State University, Cleveland, Ohio
Herbert Cecil Brokenshire, B.S., 1920, Middlebury CollegeLincoln, Mass.
Ruth Foster Crabtree, A.B., 1921, Barnard CollegeMontgomery, N. Y.
Frederick Anthony Cracco, A.B., 1921, Cornell University. Jersey City, N. J.
Irene Davis, A.B., 1921, Cornell University
David Lion Drabkin, A.B., 1919, College of the City of New York,
New York, N. Y.
Robert Gill Mills Dunovant, A.B., 1917, Wofford College, Edgefield, S. C.
Garrett DeNyce Duryea, A.B., 1921, Cornell UniversityBrooklyn, N. Y.
Bernard Samuel Fein, A.B., 1920, New York UniversityNewark, N. J.
Robert Kenneth Felter, A.B., 1920, Cornell UniversityPearl River, N. Y.
Julian Maxwell Freston, A.B., 1921, Cornell University Highland, N. Y.
Thomas Joseph Garrick, A.B., 1917, Boston CollegeSomerville, Mass.
Alice Stearns Gibb, A.B., 1918, Barnard CollegeNew York, N. Y.
Harlan S. Heim, A.B., 1920, Western Union College Dawson, Neb.
Joseph Herzstein, B.S., 1913, College of the City of New York, M.S.,
1918, Massachusetts Institute of Technology New York, N. Y.
Martin Francis Hession, A.B., 1917, College of the City of New York,
New York, N. Y.
Hall Gillam Holder, A.B., 1920, Pomona CollegeSantee, Calif.
Evelyn Holt, A.B., 1919, Wellesley College Summit, N. J.
Kiyoshi Hosoi, B.S., 1921, University of Hawaii
Russell Hills Iler, A.B., 1920, Cornell UniversityBrooklyn, N. Y.
Seth Ransom Jagger, A.B., 1921, Cornell UniversityFlushing, N. Y.
Louisa Edwina Keasby, A.B., 1919, A.M., 1920, Cornell University,
New York, N. Y.
Frank Everts Kellner, B.S., 1920, University of Washington Hamilton, Wash.
Winifred Kirk, A.B., 1915, Cornell University New York, N. Y.
Willis Sackett Knighton, A.B., 1920, Cornell University New York, N. Y.
James Rosario Lomauro, A.B., 1920, Johns Hopkins University. Passaic, N. J.
William Michael Maloney, A.B., 1921, Cornell University. Los Angeles, Calif.
William Claire Menninger, A.B., 1919, Washburn College, M.A., 1922,
Columbia University
Colonial Children Chi

A. Lardner Moore, A.B., 1921, Cornell University
John Henry Trescher, A.B., 1921, Cornell UniversityJeanette, Pa.
William Henry Von Oehsen, A.B., 1921, Cornell University. New York, N. Y. Glenn Lavar Voorhees, B.S., 1916, University of Utah Los Angeles, Calif.
Frederick Leon Vosburgh, A.B., 1921, Cornell UniversityAuburn, N. Y.
Stephen Weissberger, B.S., 1920, College of the City of New York,
New York, N. Y. Walter Frederick Welton, A.B., 1919, Columbia University. White Plains, N. Y.
David Wexler, A.B., 1921, Cornell University
Annie Yoffa, A.B., 1921, Cornell University Brunswick, Victoria, Australia
THIRD YEAR.
Rose Henri Andre, A.B., 1920, Cornell UniversityBuffalo, N. Y. Walter Joseph Becker, A.B., 1922, Cornell UniversityNew York, N. Y.
Edith Dorothy Bell, A.B., 1920, Wellesley CollegeSalisbury, Conn.
William Berman, A.B., 1922, Cornell University
George Birnbaum, B.S., 1921, College of the City of New York, New York, N. Y.
Victor August Blenkle, A.B., 1922, Cornell UniversityJersey City, N. J.
Knox Brittain, A.B., 1922, Cornell University Downsville, N. Y.
Katharine Brooks, A.B., 1920, Vassar College
Harold Burg, B.S., 1921, College of the City of New YorkNew York, N. Y.
Rebecca Burr Carter, A.B., 1921, Vassar College Washington, Conn.
Bryant Elliott Christensen, A.B., 1922, University of Colorado. Dodge City, Kan. Enid Crump, A.B., 1922, Cornell University
David Davis, B.S., 1922, Cornell University
William Courtney Douglass, B.S., 1921, Wooster CollegeShanghai, China
Theodore Dunham, Jr., A.B., 1921, Harvard UniversityNew York, N. Y.
Reinhold Otto Ebert, A.B., 1922, M.A., 1923, University of Wisconsin,

Ralph Augustine Eckhardt, A.B., 1922, University of Rochester, Rochester, N. Dennis Grooms Evans, B.A., 1920, Vanderbilt University Tompkinsville, K Walter John Farr, B.A., 1922, Cornell University Hoboken, N. Clement Coleman Fenton, A.B., 1915, Columbia University, M.S., 1922, University of West Virginia New York, N. "Edmund Warner Fisher, Ch.E., 1918, Polytechnic Institute of Brooklyn, A.M., 1921, Columbia University	.у. J. Y. Y.
Brooklyn, N. New York, N. Harry Hanfling, B.S., 1922, Barnard College	Y. Y. Y. C. Y. A. II. a sy n. ss. Y. tt. J. Y. Y. II.
Samuel Schwartz, B.S., 1921, Cornell University	s
Robert Saunders Ackerly, A.B., 1922, Cornell University	

Walter Ing Akana, A.B., 1922, Cornell University
Myron August, A.B., 1922, Western Reserve University
Roswell Kingsbury Brown, B.S., 1919, Wooster College Winona Lake, Ind. Katharíne Kundsen Burnet, A.B., 1921, Vassar College East Orange, N. J. Lyman Burnham, A.B., 1923, Cornell University
Brooklyn, N. Y. Edward Kenneth Horton, A.B., 1922, Cornell University Whitehall, N. Y. Marion Gertrude Josephi, A.B., 1922, Wellesley College New York, N. Y. Edward Lawrence Keyes, B.S., 1921, Princeton University. Forest Hills, N. Y. Edwina Kittredge, A.B., 1922, Vassar College North Andover, Mass. Joseph Harris Lapin, B.Chem., 1920, Cornell University Brooklyn, N. Y. McKinley London, B.A., 1922, Ohio State University Cleveland, Ohio Roland Leonard Maier, A.B., 1923, Cornell University Schenectady, N. Y. Dean Wilson Marquis, B.S., 1922, Wooster College Wooster, Ohio Joseph Bryant Mathewson, A.B., 1923, Cornell University Bath, N. Y. John G. McGrath, A.B., 1923, Columbia University Bath, N. Y. John G. McGrath, A.B., 1923, Columbia University Brooklyn, N. Y. Edwin Francis Merolla, A.B., 1923, Cornell University Brooklyn, N. Y. George Samuel Meister, B.S., 1919, New York University Brooklyn, N. Y. Raymond Joseph Millemann, B.S., 1922, Dartmouth College Brooklyn, N. Y. Norman Slawson Moore, A.B., 1923, Cornell University Ithaca, N. Y. Nathan Nemerson, B.S., 1922, New York University Brooklyn, N. Y.

Roger Wendell Ogburn, A.B., 1921, University of North Carolina, Greenboro, N. C.
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Frederick Henry Amendola, B.S., 1923, College of the City of New York, New York, N. Y.
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Virgil B. DeWitt, A.B., 1923, Hamilton College
William Louis Fleishfarb, B.S., 1923, New York University. Brooklyn, N. Y. John Luke Flood, Columbia University*

^{*}Admitted under Clause II.

William Travis Gibb, Columbia University*
New York, N. Y. Benjamin Frank Glasser, B.Chem., 1920, Cornell UniversityBrooklyn, N. Y. Alfonso Facchetti Guiglia, Alfred University*New York, N. Y. Leander Arman Guite, B.S., 1923, Colby CollegeWaterville, Me. Walter Gerard Hanlon, A.B., 1922, Columbia UniversityStapleton, N. Y. Frank Edward Hunter, A.B., 1923, Hamilton CollegeNew York, N. Y. Frederick Theodore Ketchum, A.B., 1923, Cornell UniversityOwego, N. Y. Solomon Sabesan Lasky, B.S., 1918, College of the City of New York, Syracuse, N. Y.
Milton I. Levine, B.S., 1923, College of the City of New York Yonkers, N. Y. Wallace Lisbon, Ph.B., 1923, Brown University
Lausanne, Switzerland Malcolm Woodruff Mason, B.S., 1923, New York UniversityBrooklyn, N. Y. Joseph Harold Merin, B.S., 1923, College of the City of New York, New York, N. Y.
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Nathan Hudes*, Cornell UniversityBrooklyn, N. Y.
Thomas A. Killip, Jr.*, Rochester UniversityRochester, N. Y.
George Ladas*, Cornell University
Howard S. Liddell, A.B., 1917, A.M., 1918, University of Michigan; Ph.D., 1923,
Cornell University
Robert M. Lintz*, Cornell UniversityNew Kensington, Pa.
Richard L. Long*, Cornell University
Henry Lowey*, Cornell University
Chauncey J. Mardis, A.B., 1923, Ohio UniversityLebanon, Ohio
Carlota Mendes*, Cornell University
Joseph Polakoff, B.S., 1923, Cornell UniversityBrooklyn, N. Y.
Raymond G. Senour*, Cornell UniversityBellevue, Ky.
Ethel Simpson*, Cornell University
Anthony Skur, A.B., 1923, Western Reserve UniversityCleveland, Ohio
Raymond D. Snyder, Cornell University
John P. Stump, A.B., 1923, Johns Hopkins
Florence E. Warner*, Cornell UniversityBinghamton, N. Y.
H. Lynn Wilson*, Cornell UniversityBuffalo, N. Y.
Frederick Ziman*, Cornell UniversityBrooklyn, N. Y.

Candidates for the Degree of Doctor of Philosophy.

Frank Anthony Csonka, Chem. E., 1910, University of Budapest, New York, N. Y. Earl A. Martin, A.B., 1914, A.M., 1916, University of Missouri, Bethany, Mo. Hugh Ellis Morrow, B.S.A., 1904, University of Arkansas.....Brooklyn, N.Y. Benjamin Broadus Steedly, M.D., 1901, Columbia University, Spartanburg, S. C.

Graduate Students (Not Candidates for a Degree)

Milton Lionel Berliner, M.D., 1918, Long Island College (Ophthalmology)

Brooklyn, N. Y.

F. C. Christensen, M.D., 1908, Marquette University (Anatomy), New York, N.Y. James A. Clark, M.D., 1912, Medico Cherurgical (Ophthalmology),

New York, N. Y.

Abraham Feitelberg, A.B., 1920, M.D., 1923, Cornell University (Ophthal-mology), New York, N. Y.

Louis A. Feldman, M.D., 1914, New York University & Bellevue Hospital

Medical College (Ophthalmology), Brooklyn, N. Y. Harry G. Goldman, M.D., 1910, New York University, LL.B., 1922, New

York Law School (Anatomy), New York, N. Y. Samuel William Green, M.D., 1917, Union University (Ophthalmology)

Brooklyn, N. Y.

George L. Hardin, B.S., 1921, M.D., 1922, University of Cincinnati

(Ophthalmology), Alma, Neb.

Joel DuBois Holston, M.D., 1896, Eclectic Medical College of Cincinnati (Pathology), New York, N.Y.

^{*}Admitted under Clause II.

STUDENT REGISTER Morris Jaffe, M.D., 1917, Long Island College (Ophthalmology), New York, N. Y.

(Immunology), Brooklyn, N. Y.

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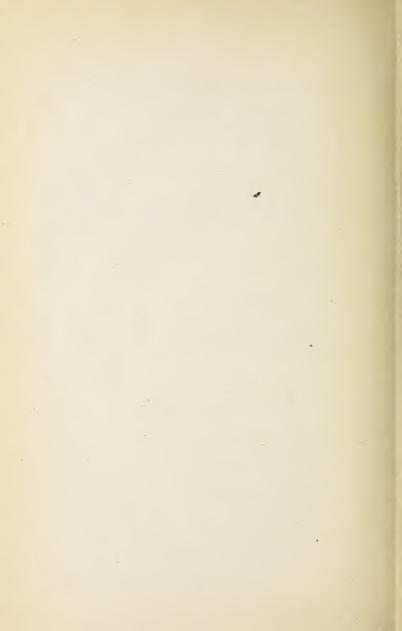
Philip Levine, B.S., 1919, M.D., 1923, College of the City of New York

Raymond Hamilton Mathews, B.S., 1912, New York University, M.D., 1915,

J. G. Maupin, B.S., 1910, Fordham University, M.D., 1919, N. Y. Homeo-

Columbia University (Ophthalmology), Morristown, N. J.

pathic Medical College (Pathology), New York	, .N.
Malcolm K. McCullough, M.D., 1921, University of Texas (Ophathalmolog	(y)
New Yor	k, N.
John Harold Morris, A.B., 1911, M.D., 1914, Cornell University (Anatom	ıy)
Ithac	a, N.
Herman Ostrow, M.D., 1917, Long Island College (Ophthalmology)	
Brooklyn	ı, N.
W. Samuel Schwartzman, M.D., 1903, Cornell University (Ophthalmolog	y)
New York	ς, Ν.
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The COLLEGE OF AGRICULTURE (Degree B.S.)

The COLLEGE OF ARCHITECTURE (Degree B.Arch.)

The COLLEGE OF CIVIL ENGINEERING (Degree C.E.)

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